### **HITACHI**

# Small footprint, big impact

Variable Refrigerant Flow Systems
Mini VRF for new construction
and renovation projects



Please scan QR code to download the catalog and more information

Cooling and heating



### VRF SYSTEMS

### HITACHI HERITAGE IN COOLING AND HEATING







IDU: 4-way Ceiling Cassette type

1983

VRF 1st generation
World's
First

IDU: Ceiling Cassette type
Wo

Scroll Compressor Production for AC unit

Hitachi's first VRF "High-Multi series
• Contains multiple reciprocating compressors

Individual IDU control available

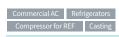
Compressor for REF Casting

1960

Commercial AC Refrigerators
Compressors

1980

1950



**1970** 

1976

Roller Casting



Commercial AC Refrigerators

Compressor for refrigerators

1972

IDU: Floor Exposed type



IDU: Ceiling Built-in type



ODU: for low-ambienttemperature market



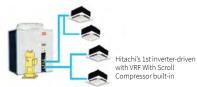
IDU: Ceiling Suspended type



ODU: PAC controlled by micro-computer built-in



VRF 2nd generation





#### 2002



Newly R410A adopted VRF Heat Pump and Heat Recovery





#### 2015

Johnson Controls and Hitachi form the global joint venture



1990 Commercial AC Compressors VRF

Compressors VRF

2015

2010



7th Generation of VRF Technology:

VRF Systems Debut in North American market

#### 2016

8th Generation of VRF Technology: Mini VRF and Low Ambient VRF systems introduced into North America



#### 2017

8th Genereation Technology introduced into North America



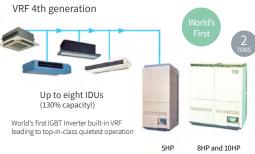
#### 2018

Water-Source VRF Technology introduced into North America. One of the largest capacity water-source systems on the market



3

#### 1991



#### 1999

VRF 5th generation

Newly R407C adopted VRF SET FREE FSG: heat-pump type SET FREE FXG: heat-recovery type

Up to 12 IDUs! (130% capacity!)



#### 2012

VRF 7th generation



2016 VRF 8th generation



Hitachi New Generation VRF This New Generation VRF is 8th Generation VRF after 33 year's of experience

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The information contained in this catalog is for illustration purposes only and is subject to change at the sole discretion of Johnson Controls. Statements, figures, calculations, plans, images and representations are only examples. Johnson Controls encourages you, as the purchaser, to analyze your HVAC requirements and to work with Johnson Controls to determine the exact VRF System to fulfill your needs.

# S ENJOY A BETTER TOMORROW

Mini VRF systems offer a host of benefits to you and your customers. These small-footprint, modular systems offer tremendous design flexibility, enabling you to solve multiple HVAC challenges. Your customers will appreciate the exceptional energy savings and individualized comfort they provide.

#### **Design with freedom**

A variety of standard modular components let you customize and size equipment to meet specific project requirements. As ductwork is generally needed only for ventilation, ducts can be smaller, reducing capital cost. Systems can easily be adapted as space is reconfigured. There is no need to remove and replace the original unit or reconfigure ductwork.

#### Install with ease

Hitachi Mini VRF systems are designed for quick and simple installation. Piping from the outdoor units can be connected from the front, back, side, or underneath. Indoor units are relatively small and light and easy to transport and handle. Service is simple too: systems need little maintenance beyond changing filters and cleaning coils. Removal of a single panel provides easy access to all components: control boards, electrical connections, compressor and piping.

#### **Enjoy guilt-free comfort**

These compact systems are among the most energyefficient HVAC options available today, so customers never have to choose between comfort and savings.

Variable-speed compressors provide extremely high part-load efficiency. The systems essentially eliminate the energy loss that occurs in conventional, ducted central systems that may account for as much as 30% of energy consumption. In fact, these green technology systems can help customers attain LEED® certification points for resource efficiency.

Occupants will enjoy unparalleled comfort with Hitachi Mini VRF Systems. Temperature can be set individually for multiple zones to suit different needs. Once the temperature is set, the system's variable-speed compressors and precise modulation help maintain it within a narrow range, ensuring consistent comfort. Occupants will also appreciate the system's whisperquiet operation.

#### Plan on years of worry-free service

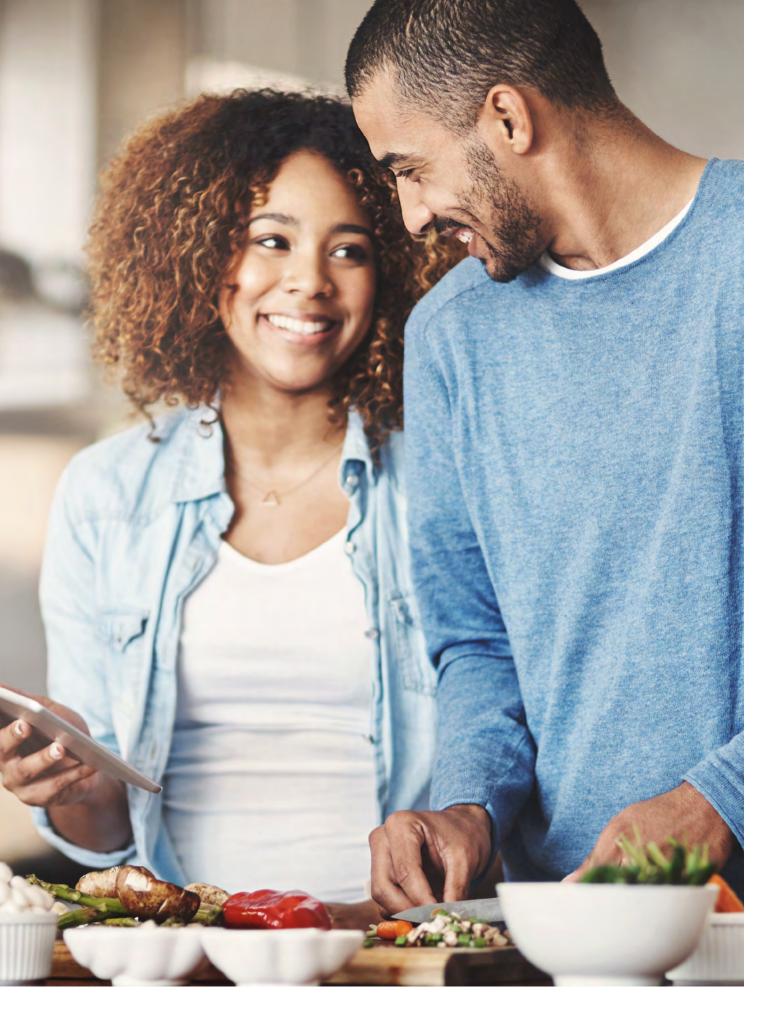
Hitachi Mini VRF Systems feature the Hitachi-designed, high-efficiency scroll compressor. This exclusive technology is known for its excellent reliability, efficiency and low noise level.

#### Hitachi Mini VRF Systems boast impressive efficiency ratings

SEEREERHSPFCOPSeasonal EnergyEnergyHeating SeasonalCOP up to 5.12Efficiency RatioEfficiency RatioPerformance FactorCOP2 up to 5.12

 SEER up to 24.1
 EER up to 16.7
 HSPF up to 12.8

 SEER2 up to 23.1
 EER2 up to 16.7
 HSPF2 up to 10.8



# ENJOY A BETTER TOMORROW (Continued)

#### You are in control

You set the level of control with options that range from wired individual controllers to gateways for building automation systems.

A wide selection of thermostats (controllers) are available for indoor fan coil units from simple units with on/off, setpoint, load and speed settings, to programmable units that enable scheduling. Wireless units are also available to remotely control conditions.

**Central station controllers** for larger projects provide remote control and scheduling of the entire system from one or more control points.

**Adapters (gateways)** enable control of large buildings or campuses through building automation systems such as Facility Explorer®.

#### The ideal choice for multiple applications

The many advantages offered by the Hitachi Mini VRF System make it the optimal choice for a wide range of new construction and retrofit projects including:

- Buildings with multiple zones that have different comfort needs such as hotels, schools, medical office buildings and commercial office buildings
- Historical building renovations in which ducted HVAC options are severely limited and the basic building structure must not be disturbed
- **Residential buildings** including apartments, townhomes, single-family homes and condominiums
- **Light commercial buildings** such as small retail shops and churches





#### **Industry certified**

Hitachi VRF Systems are Intertek ETL Listed (Canada & USA), signifying that they comply with the standard of Heating and Cooling Equipment (ANSI/ UL 1995 and CAN/CSA C22.2 No. 236-11, 4th Edition, October 14, 2011). Our Mini VRF products are tested under AHRI 210/240.

The systems are also certified by the Air Conditioning, Heating and Refrigeration Institute.



ENERGY STAR certified product (Only for three and four ton)

Proper sizing and installation of equipment is critical to achieve optimal performance.

### LATEST I<u>NNOVA</u>TIONS

SILENT-ICONIC™ 4-WAY CASSETTE PANEL

#### **Create the perfect atmosphere**

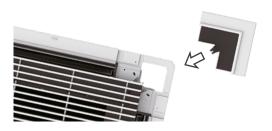
Enjoy the unobtrusive design of ducted indoor units and the cost savings of cassette units with a sophisticated solution that will please the visually discerning and budget-minded alike. The Silent-Iconic 4-Way Cassette Panel gives you the best of both worlds

The four flaps of the Silent-Iconic are crafted to reduce visual impact yet maintain precise airflow control. Further minimizing the cassette's appearance, the central inlet of the unit is louvred, so it integrates perfectly into the ceiling. Air vents are tastefully hidden, so the indoor unit blends seamlessly into its surroundings.



#### Installation is a breeze

Corners slide into place for hassle-free fastening.





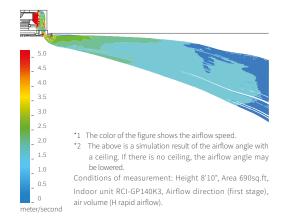
Blind-shaped air inlet port

This unique, award-winning panel turns your indoor unit into a design statement.



#### Looks and comfort delivered

Used with the Hitachi 4-Way Cassette, air is dispersed uniformly through four artfully concealed ducts for optimal comfort throughout the space.





#### Designed with attention to detail

The small space between the panels and the ceiling creates a 'lighter' visual effect.







The Silent-Iconic 4-Way Cassette Panel has won design excellence awards in prestigious international competitions. Best of all, it provides a cost-effective solution that is as functional as it is good-looking. Available in white or black, the Silent-Iconic offers style and cost-savings in one optimal solution.

# EVERYTHING YOU NEED FOR SUCCESS

Effective training, intuitive design and selection software, advanced logistics timely delivery and easily-accessible documentation form a powerful support package that adds substantial value to Hitachi Mini VRF Systems.

### **Expert instructors and hands-on experience for your team**

Comprehensive training programs provide knowledge and skills necessary to effectively and efficiently deploy Hitachi Mini VRF technology. Our world-class training centers offer a full VRF course curriculum with specialized modules and topics that help:

• Designers select and configure the right equipment easily and accurately

- Installers learn the proper procedures and complete jobs accurately, on time and on budget
- Service technicians maintain, troubleshoot and repair systems efficiently

The training centers include a dedicated VRF laboratory to provide hands-on experience with the various systems, components and controls. Videos and webinars supplement classroom learning on specific subjects and refresh and enhance the skills of your design, installation and service teams.

Hitachi Mini VRF training programs help deliver peace of mind so that your staff is prepared to support your business with the knowledge to compete in a growing industry.





# EVERYTHING YOU NEED FOR SUCCESS (Continued)

### Right-size systems with intuitive selection software

The Hitachi Mini VRF selection software intuitively guides you step by step through equipment selection so that can quickly and accurately choose an appropriate and cost-effective system configuration for each application. The web-based program allows access from any computer or tablet. The software helps you:

- Design accurate final system drawings, including piping and wiring diagrams in an easy, quick, step by step process
- Accurately select systems using a System Sizing Analysis. The process starts with the indoor fan coil units so that outdoor units are optimally sized. Proprietary algorithms calculate the system size using data input on the indoor units, load and measurements, so your system does not include capacity that will go unutilized
- Use intuitively-designed features and functionality that make the design process easy, fast and accurate. You can select options and accessories quickly, easily and accurately without the need for additional information or calculations



# EVERYTHING YOU NEED FOR SUCCESS (Continued)

#### Expect the right equipment on site and on time

Ample inventory and advanced order management and logistics systems can help you complete installations in a timely manner. Consistent service and predictable deliveries help you prevent delays waiting for essential components and enable you to set a project timeline and schedule labor efficiently. Our state-of-the-art main distribution center is located near Memphis, Tennessee, where UPS and FedEx have hubs. This enables us to provide fast, accurate deliveries and simplifies expedited shipments.

#### Find information you need 24/7



Easy access to product information helps designers, contractors and service personnel work accurately and efficiently.

Our secure web portal, HVACNavigator.com, provides product documentation, technical and service manuals, troubleshooting guides, brochures, videos, technical support, contact information and more.

#### Let's go to work - together

Hitachi Mini VRF Systems can be configured to meet your project requirements and deliver exceptional performance. Heat pump units with DC inverter-driven compressors offer energy savings and the ability to scale to size. Indoor units for ducted or non-ducted applications offer optional motion sensing control for even greater energy savings. Additional energy savings can be achieved with the EconoFresh Economizer Indoor Unit which provides free cooling when conditions permit. A host of options, controls and accessories help ensure a custom fit for your project and years of comfort for your customers.

Enjoy the advantages of working with our team while bringing the many benefits of Hitachi Mini VRF Systems to your customers.



# ADVANTAGES FOR YOUR ENTIRE TEAM

### Summary of features and benefits

	FEATURES	ADVANTAGES	BENEFITS
	Compact footprint	Ideal for areas with strict lot-line codes	Expand options for positioning outdoor units
ER	Modular components	Require less indoor space than conventional systems	Simplify design process     Allow easy updates in reconfigured or expanded space
DESIGN	Non-ducted systems	Ultimate in design flexibility     Reduce clearance between building floors	Reduce system costs     Ideal for historic renovations
ARCHITECT / SYSTEM DESIGNER	Ducted systems	Accommodate retrofit by making use of existing duct infrastructure     Suit unique buildings that include ducted and non-ducted areas	Reduce overall construction costs
ITEC	Heat pump VRF systems	Precisely heat or cool multiple zones	Provide extreme flexibility in system design
ARCHI	Comprehensive training	Tailor modules to specific job functions	Enable effective equipment selection and specification
	Web-based system selection software	<ul> <li>Intuitive functionality that simplifies and speeds designs</li> <li>Accessible from any computer or tablet</li> </ul>	Allow confident selection and right-sizing of systems

	FEATURES	ADVANTAGES	BENEFITS		
Installation simplicity		Outdoor unit piping can be connected from front, side, back or underneath.	Reduce installation time and cost		
OR/INSTA	Comprehensive training	Tailor modules to specific job functions	Enable professional, high-quality, timely installation		
	Consistent, reliable product delivery	• Ensure correct components are delivered to job sites on time	Enhance installation efficiency     Allows efficient labor scheduling		
. CONTRACT	Easy maintenance access	All components easily accessible	Speed up time spent on maintenance, repair and troubleshooting		
MECHANICAL	Easy access to product information	All product information is available on HVACNavigator.com	Simplify and speed maintenance, troubleshooting and repairs		
MECH	Compact and lightweight • Easy to handle outdoor units		Reduce installation time and cost		

# ADVANTAGES FOR YOUR ENTIRE TEAM (Continued)

		FEATURES	ADVANTAGES	BENEFITS
		Single phase power supply	• Flexibility in selection of buildings and locations	Mini VRF can be used in most light commercial and residential applications
		Designed for optimized efficiency	SEER is industry's highest for VRF systems     Highest COP of Mini VRF systems on the market	Save energy
		Optimum individualized comfort	Connect up to eight Indoor Units to one Outdoor Unit	Efficient heating or cooling     Set-temperatures per zone increase occupant comfort
		Noise reduction preference mode	User can choose from several noise reduction levels	Extremely quiet (sound ratings as low as 44 dBA for Outdoor Units; 28 dBA for Indoor Units) Ideal where outdoor units are positioned on side of building or in locations where there are noise restrictions
	Compressor	DC inverter-driven scroll compressor	Engineered to deliver the optimum efficiency at normal load conditions	A leader in the Mini VRF system industry     Highest SEER     Highest COP
		Compressor modulation	Smoothly deliver only the exact amount of refrigerant needed for the load	Allow fine control for optimum comfort     Save energy
BUILDING OWNER	Outdoor Units	Demand control	Users can select several power-saving levels	Limit electric demand charges     Limit equipment wear and tear     Reduce noise
BUILDING		Compact and lightweight	Can be placed in tight areas such as patios and balconies	Can save valuable space
	Jnits	As high as .74 in. W.G. static pressure in ducted systems	Offer adjustable speeds to match the static pressure requirement	Flexibility to accommodate long or short ductwork runs
		Optional motion and radiant sensors	Set back temperature when space is unoccupied, increasing efficiency even further	Save energy
		H-Link II Protocol	Control multiple indoor and outdoor units from one control point     Add versatility to connect various central control options	Maximize indoor comfort     Save energy     Improve system management
	Controls	Temperature control	Adjust in 1°F increments     Adjustable fan speeds	Auto-adjust for daylight saving time     Provide options to satisfy multiple projects/ buildings
	Con	VRF Smart Gateway	• Enable control of VRF systems by way of a building management system (e.g., Facility Explorer®) for almost unlimited control of buildings in campus enterprises	Reduce integration time and expense with automatic data formatting Full BMS capabilities enable superior control of all system components Access Wi-Fi for 24/7 monitoring and control from laptops, tablets and smartphones

### OUTDOOR UNITS MINI VRF

### MINI VRF OUTDOOR UNITS

**SINGLE-PHASE 208/230V (HEAT PUMP)** 



# **MINIVRF OUTDOOR UNITS**

Exceptionally efficient Hitachi Mini VRF systems provide design versatility and flexibility and quiet personalized comfort. Single phase (208-230V) three-, four- and five-ton heat pump systems with inverter compressor technology provide cooling up to 118°F and heating down to -4°F ambient. Multiple indoor unit options enable individual comfort control of up to eight rooms/zones.



Mini VRF 208/230V H	IP Heat Pump Units	3 Ton	4 Ton	5 Ton		
Mini VRF Outdoor Ur	nit Model	HVAHP036B21S	HVAHP048B21S	HVAHP060B21S		
Performance	Rated Cooling Capacity (Btu/h)	36,000	48,000	60,000		
	Rated Heating Capacity (Btu/h)	40,000	54,000	64,000		
	Operating Range* – Cooling (°F)		23 to 118			
	Operating Range* – Heating (°F)		-4 to 73**			
	Power Supply (V/ph/Hz)	208-230 / 1 / 60				
Configurations	Number of Indoor Units	1 to 6	1 to 8	1 to 8		
Refrigerant Piping	Maximum Piping Length (ft)		492			
	Maximum Total Piping Length (ft)		984			
	Maximum Vertical Distance, IU to OU  — OU above IU / OU below IU (ft)		164 / 131			
	Maximum Vertical Distance Between Indoor Units (ft)		49			
Dimensions	H x W x D (in)		54 5/16 x 37 3/8 x 14 9/16			

#### **Hitachi Mini VRF Outdoor Units**

Hitachi Mini VRF Heat Pump units offer an extended operating temperature range: outdoor ambient temperature as low as 23°F (-5°C) in the cooling mode and as low as -4°F (-20°C) in the heating mode.

#### All outdoor units feature:

- Long refrigerant piping lengths up to 492 feet piping length
- Advanced defrost cycle operation in the heating mode
- Ability to operate up to eight indoor units on a single piping network
- Power-saving demand control for reduced peak load and energy savings
- Optional Low Sound Mode which reduces the standard low sound level even further
- Single-zone or Multi-zone operation - units can be operated either in single or multi-zone

<sup>\*</sup> For more details and limitations, please consult Hitachi sales team or refer to product manuals. \*\* The default value is  $59^\circ F$ . Please refer to engineering manual to increase it to  $73^\circ F$ .

### OUTDOOR UNITS



# MINI VRF HEAT PUMP OUTDOOR UNITS 208/230V HP | THREE-, FOUR- AND FIVE-TON SYSTEMS

3-, 4- and 5-Ton	Туре				Mini VRF Outdoor Units					
Systems		3 Ton⁵		4 Ton⁵		5 Ton				
Model#						HVAHP036B21S		48B21S	HVAHPO	60B21S
Power Supply					208/230V/	/ 1PH 60Hz	208/230V/	1PH 60Hz	208/230V/	1PH 60Hz
Capacity (Nominal) 1	Cooling	Capacity (Nominal)	Btu/h	(kW)	36,000	(10.6)	48,000	(14.1)	60,000	(17.6)
		Power input	ļ	ΚW	2.	53	3.7	78	5.	05
		Current input		A	12.3 ,	/ 11.1	18.6 /	16.9	24.8	22.4
	Heating	Capacity (Nominal)	Btu/h	(kW)	40,000	11.7	54,000	15.8	64,000	18.7
		Power input	ļ	ΚW	2.	40	4.0	00	4.	40
		Current input		A	11.8	/ 10.6	19.6 /	17.7	21.7	19.6
Efficiency Ratings <sup>2</sup>	Cooling	Capacity (Rated)	Bt	tu/h	36,000	36,000	48,000	48,000	60,000	55,000
	(for Non-ducted and Ducted)	EER	Btı	ı/Wh	16.70	13.80	16.70	13.10	12.20	9.70
Cooling Operating Range Heating Operating Range	and Ducted,	SEER	Btı	ı/Wh	23.50	18.70	24.10	18.40	16.80	16.00
		EER2	Btı	ı/Wh	16.70	13.20	16.70	12.50	12.20	9.70
		SEER2	Btı	ı/Wh	22.20	16.90	23.10	18.10	15.00	16.30
	Heating	Rated Capacity	Bt	tu/h	40,000	40,000	54,000	54,000	64,000	64,000
	(for Non-ducted and Ducted)	СОР	V	I/W	5.12	3.90	4.56	3.86	3.90	3.30
		HSPF	Btu/Wh		12.80	11.00	11.70	11.80	12.10	11.00
		COP2	W/W		5.12	3.90	4.56	3.75	3.90	3.30
		HSPF2	Btı	ı/Wh	10.80	9.50	9.80	9.70	10.50	8.50
Cooling Operating Rang	ge³	Outdoor	°F DB (°C DB)		23 (-5) ~ 118 (48)		23 (-5) ~ 118 (48)		23 (-5) ~ 118 (48)	
Heating Operating Rang	ge³	Outdoor	°F WB (°C WB)		-4 (-20) ~ 59 (15)		-4 (-20) ~ 59 (15)		-4 (-20) ~ 59 (15)	
Outer Dimensions	Height		in	(mm)	54-5/16	(1380)	54-5/16	(1380)	54-5/16	(1380)
	Width		in	(mm)	37-3/8	(950)	37-3/8	(950)	37-3/8	(950)
	Depth		in	(mm)	14-9/16	(370)	14-9/16	(370)	14-9/16	(370)
Weight	Net		lbs	(kg)	249	(113)	249	(113)	249	(113)
Connection Ratio	Total Indoor Unit	Capacity	% 60-130		130	60-130		60-105		
	Max. (Recomment indoor units/syst				(	6 8		1	8	
Compressor	Type		_		HA36PH	HD-A1S2	HA36PHD-A1S2		A36PHD-A1S2	
	Motor Output (Po	ole)	-/-		3PH / 6		3PH / 6		3PH / 6	
	Operation Range		%		10 ~ 100		10 ~ 100		10~100	
	Refrigeration Oil	Туре	-		FVC68D		FVC68D		FVC68D	
Fan	Туре			-	Propel	ller Fan	Propell	er Fan	Propel	ler Fan
	Motor Output			W	58 -	+ 58	58 +	- 58	58 -	- 58
	Quantity		Ç	)'ty			2	2		
	Air Flow Rate		cfm	(m³/min)	3177	(90)	3530	(100)	3530	(100)
Electrical	Min Circuit Amps			A	3	31	3:	1	3	1
	Max. Overcurrent	Protective Device		A			4	0		
Sound Pressure Level <sup>4</sup>	Cooling (Night-Shift)		dI	B(A)	51 (44)		52 (46)		53 (46)	
	Heating			B(A)	5	52	54		5	6
Refrigerant	Туре			-		7	R41	LOA		
	Charge amount		lbs	(kg)	7.9	(3.6)	7.9	(3.6)	7.9	(3.6)
Main Refrigerant Piping	Gas Line		in	(mm)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)
i ihiiik	Liquid Line		in	(mm)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)

#### NOTES

- Nominal capacity conditions are based on AHRI standard.
  Visit www.ahrinet.org for more information.
- Visit www.ahrinet.org for more information.

  2. Efficiency ratings are based on the AHRI 210/240 test standard. EER, SEER, COP and HSPF are based on AHRI 210/240-2017. EER2, SEER2, COP2 and HSPF2 are based on AHRI 210/240-2023.
- There are some exceptions and notes for cooling and cooling operation ranges. For details, refer to Section 2.12 'Operation Range'.
- Measurement Point: 3.3 ft. (1m) from the air outlet side, 4.9 ft. (15m) from floor level. The operation sound is measured in an anechoic chamber. However, the actual operation sound may appear louder or with an echo because of surrounding
- environmental noise. Be sure to check environmental conditions before installation. The sound of the air inlet side may be 3dB higher than that of the air outlet side.

  5. Unit is ENERGY STAR certified and ENERGY STAR
- Unit is ENERGY STAR certified and ENERGY STAR certification is based on AHRI testings with the M test procedure. Please contact Johnson Controls-Hitachi for any further information.



# INDOOR UNITS FEEL THE DIFFERENCE



#### **Indoor Units**

The Mini VRF Outdoor Unit is compatible with all Hitachi VRF indoor units. Hitachi VRF indoor units operate quietly and are easy to install, service and maintain. A wide variety of non-ducted and ducted units are available in styles and capacities to fit multiple applications. Units operate quietly with sound ratings as low as 26 dBA.

<b>Non-Ducted</b>	Unite	<b>Ducted Units</b>
Non-Ductea	Ullits	Ductea Units

1-Way Cassette Ducted High Static

2-Way Cassette Ducted Medium Static

4-Way Mini Cassette Ducted Slim

4-Way Cassette EconoFresh Economizer

Ceiling-Suspended Multi-Position Air Handler

Wall-Mount Multi air Multi-Position

Air Handler

Floor-Exposed (Built-in Control Box Type)



#### Choose the style and size from the wide selection of indoor units to meet your requirements for layout and design

#### Non-ducted indoor unit model numbers









#### 1-Way Cassette

HIC1006B2(1,2)S HIC1008B2(1,2)S HIC1012B2(1,2)S HIC1015B2(1,2)S



HIC2018B21S HIC2024B21S

#### **4-Way Cassette**

HIC4008B21S HIC4024B21S HIC4012B21S HIC4030B21S HIC4015B21S HIC4036B21S

HIC4048B21S

#### 4-Way Mini Cassette

HICM008B21S HICM012B21S HICM015B21S HICM018B21S







#### **Ceiling Suspended**

HICS015B2(1,2)S HICS024B2(1,2)S HICS030B2(1,2)S HICS036B2(1,2)S

#### **Wall Mount**

TIWM015B2(1,2)S

TIWM006B2(1,2)S TIWM018B2(1,2)S TIWM008B2(1,2)S TIWM024B2(1,2)S TIWM012B2(1,2)S TIWM030B2(1,2)S

HIC4018B21S

#### Floor Exposed

HIFE006B21S HIFE008B21S HIFE012B21S HIFE015B21S

#### **Ducted indoor unit model numbers**









#### **Ducted High Static**

HIDH015B2(2,3)S	HIDH030B2(2,3)S
HIDH018B2(2,3)S	HIDH036B2(2,3)S
HIDH024B2(2,3)S	HIDH048B2(2,3)S
HIDH027B2(2,3)S	HIDH054B2(2,3)S

### **Ducted Medium Static**

HIDM024B23S HIDM006B23S HIDM008B23S HIDM027B23S HIDM012B23S HIDM030B23S HIDM015B23S HIDM036B23S HIDM018B23S HIDM048B23S HIDM054B23S

#### **Ducted Slim**

HIDS006B21S HIDS008B21S HIDS012B21S HIDS015B21S HIDS018B21S

#### **EconoFresh**

HIDM030B21E HIDM036B21E HIDM048B21E

#### Multi air Multi-Position Air Handler(Built-in Control Box Type)

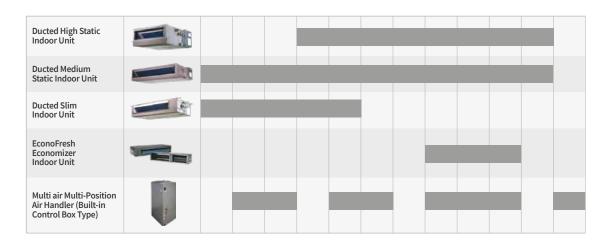
TIAH008B22M TIAH030B22M TIAH012B22M TIAH036B22M TIAH018B22M TIAH048B22M TIAH024B22M TIAH060B22M





### Choose from a wide array of options





### INDOOR UNITS OVERVIEW

#### 1-WAY CASSETTE INDOOR UNIT



This slim and stylish yet inexpensive unit is ideal for spaces that only require one-way airflow.



#### **CEILING SUSPENDED INDOOR UNIT**



This unit, with its sleek design, operates quietly and efficiently while evenly distributing airflow.



#### 2-WAY CASSETTE INDOOR UNIT



Providing bi-directional airflow, this exceptionally quiet unit is a good choice for many different spaces.



#### WALL MOUNT INDOOR UNIT



With wide-angle louvers, this unit distributes air comfortably throughout a room for an even temperature.



#### 4-WAY MINI CASSETTE INDOOR UNIT



This versatile unit is quiet, energy-efficient and compact, making it a great choice for many applications.



#### FLOOR EXPOSED INDOOR UNIT



This slim-design unit leaves design options open and is ideal for perimeter conditioning of air.



#### **4-WAY CASSETTE INDOOR UNIT**



Compact and lightweight, this unit with 4-way airflow is easy to install even in tight spaces.



# **OVERVIEW (Continued)**

#### **DUCTED HIGH STATIC INDOOR UNIT**



This unit has a high-efficiency fan motor, multiple fan speeds and bottom access for ease of service.



#### **ECONOFRESH ECONOMIZER INDOOR UNIT**



This unit combines a ducted Medium Static unit with an Economizer Kit to provide outside air/free cooling when conditions permit.



#### **DUCTED MEDIUM STATIC INDOOR UNIT**



With a high-efficiency fan motor, this unit has multiple fan speeds and access from underneath for ease of service.



#### MULTI AIR MULTI-POSITION AIR HANLDER (BUILT-IN CONTROL BOX TYPE)



single-family house.

This new Multi air AHU is simple to install, comes in three sizes and eight capacities to suit applications as small as a hotel room or office, and as large as a



#### **DUCTED SLIM INDOOR UNIT**



This slim-line unit features a high-efficiency fan motor, multiple fan speeds and access from underneath for ease of service.



# 1-WAY CASSETTE (NON-DUCTED)

Ceiling-mounted one-way cassettes offer compact designs and a choice of corner-mounted, one-way discharge or two-way discharge (from the front and downward).



Capacities 6,000 to 15,000 Btu/hr



#### **Key features**

- Electrical/blower/coil can be accessed through the bottom of the unit, service access adjacent to IDU is not required
- Sensor enables remote reading of air supply temperature
- Automatic swing louver distributes airflow evenly for uniform temperature
- Auxiliary/emergency heater control
- Setback temperature control

- Cooling and heating auto-changeover dual-setpoint control
- GentleCool feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy

								'			- 7	
Tonnage				0	.5	0.	.7	1.	0	1.	.3	
1-Way Cassette I	ndoor Unit Mod	el#		HIC1006	B2(1,2)S	HIC1008B2(1,2)S		HIC1012	B2(1,2)S	HIC1015	B2(1,2)S	
Power Supply				AC 1 Phase, 208/230V, 60Hz								
Nominal Cooling Capacity <sup>1</sup> Btu / h (kW)			6000	(1.8)	8000	(2.3)	12000	(3.5)	15000	(4.4)		
Nominal Heating (	Capacity <sup>1</sup>	Btu / h	(kW)	6700	(2.0)	9000	(2.6)	13500	(4.0)	17000	(5.0)	
Sound Pressure Le (Overall A Scale) (I		dB		34-32	-29-27	36-34-	-31-28	40-37-	33-31	42-38-	35-31	
Outer Dimensions	Height	in.	(mm)	9-1/4	(235)	9-1/4	(235)	9-1/4	(235)	9-1/4	(235)	
	Width	in.	(mm)	35-7/16	(900)	35-7/16	(900)	35-7/16	(900)	35-7/16	(900)	
	Depth	in.	(mm)	27-15/16	(710)	27-15/16	(710)	27-15/16	(710)	27-15/16	(710)	
Net Weight		lbs.	(kg)	55	(25)	55	(25)	57	(26)	57	(26)	
Refrigerant				-		'	R4	10A				
Indoor Fan	Airflow Rate	cfm		300-265-229-212 335-300-265-229		459-406-353-300		512-459-388-335				
	(Hi2-Hi-Me-Lo)	(m3/mir	(m3/min) (8.		(8.5-7.5-6.5-6)		(9.5-8.5-7.5-6.5)		(13-11.5-10-8.5)		(14.5-13-11-9.5)	
Motor Nominal Ou	tput	W		50		50		50		50		
Connections				-		'						
Refrigerant Piping						Flare	-Nut Connecti	on (with Flare N	uts)			
	Liquid LIne	in.	(mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	
	Gas Line	in.	(mm)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)	
Condensate Drain	OU	in.	(mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	
Adjustable Panel N	Iodel Name				P-AP:	36CNA		P-AP56CNA				
Applicable Indoor	Unit Model			HIC	1006B2(1,2)S a	nd HIC1008B2(1	,2)S	HIC1	012B2(1,2)S ar	nd HIC1015B2(1	,2)S	
Color				Neutral White								
Dimension	Height	in.	(mm)	1-3/8 (35)								
	Width	in.	(mm)				43-5/16	5 (1100)				
	Depth	in.	(mm)				31-1/2	2 (800)				
Net Weight		lbs.	(kg)				10 (	(4.5)		-		

#### NOTES

- Nominal capacity conditions are based on AHRI standard.
   Visit www.ahrinet.org for more information.
- The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units.
   The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

1-Way Cassette									
Compatible Accessories	HIC1006-015B2(1,2)S	Compatible Accessories	HIC1006-015B2(1,2)S						
Infrared (IR) Receiver Kit	C1IRK01	Air Outlet Shuttler Plate	PIS-56LS						
Grille for Front Discharge	DG-56SW1	Relay and 3-Pin Connector Kit	PSC-5RA						
3-Pin Connector Cable	PCC-1A	Motion Sensor Kit (for 1-Way Cassette)	SOR-NES						
Connector Cable for Auxiliary Heater	PCC-CN8-H	Remote Sensor (Control)	THM-R2A						
Duct Adapter	PD-100								

# 2-WAY CASSETTE (NON-DUCTED)

With a sound level down to 33 dB(A), this unit is among the quietest on the market. Individual louver control with auto-swing or fixed air exhaust angles brings conditioned comfort to a variety of room layouts.



Capacity is 18,000 to 24,000 Btu/hr



#### **Key features**

- Electrical/blower/coil can be accessed through the bottom of the unit, service access adjacent to IDU is not required
- Nominal capacity of 18 or 24 MBH
- Compact design requires only 11-3/4" height
- Energy-efficient DC fan motor
- Standard integrated condensate DC drain pump with 33-7/16 inch lift height
- Auxiliary/emergency heater control
- Setback temperature control

- Cooling and heating autochangeover dual-setpoint control
- GentleCool feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling
- Sensor enables remote reading of air supply temperature
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy
- Optional air filter box

Tonnage				1	.5	2.0		
2-Way Cassette Ind	loor Unit Model#			HIC20:	18B21S	HIC2024B21S		
Power Supply				AC 1 Phase, 20	08/230V, 60Hz			
Nominal Cooling Cap	pacity 1	Btu/h	(kW)	18,000	(5.3)	24,000	(7.0)	
Nominal Heating Cap	pacity <sup>1</sup>	Btu/h	(kW)	20,000	(5.9)	27,000	(7.9)	
Sound Pressure Leve (Overall A Scale) (Hi2		dB		42-39	-36-33	46-43-	39-34	
Outer Dimensions	Height	in.	(mm)	11-3/4	(298)	11-3/4	(298)	
	Width	in.	(mm)	33-7/8	(860)	33-7/8	(860)	
	Depth	in.	(mm)	24-13/16	(630)	24-13/16	(630)	
Net Weight		lbs.	(kg)	55.1	(25)	55.1	(25)	
Refrigerant				R410A				
Indoor Fan	Airflow Rate	cfm		653-582-512-441		777-688-582-459		
	(Hi2-Hi-Me-Lo)	(m3/n	nin)	(18.5-16.5-14.5-12.5)		(22-19.5-16.5-13)		
Motor Nominal Outp	ut	W		57		57		
Connections								
Refrigerant Piping				Flare-Nut Connection (with Flare Nuts)			uts)	
	Liquid Line	in.	(mm)	3/8	(9.52)	3/8	(9.52)	
	Gas Line	in.	(mm)	5/8	(15.88)	5/8	(15.88)	
Condensate Drain	OU	in.	(mm)	1-1/4	(32)	1-1/4	(32)	
Adaptable Panel Mod	del			P-AP90DNA				
Color					Neutra	l White		
Outer Dimensions	Height	in.	(mm)	1-3	3/16	(3	0)	
	Width	in.	(mm)	43-	5/16	(1,1	.00)	
	Depth	in.	(mm)	27-15/16		(710)		
Net Weight		in.	(mm)	16	ŝ.5	(7.5)		

2-Way Cassette	
Compatibility Accessories	HIC2018-024B21S
Filter Box	B-90HD
IR Receiver Kit	C2IRK01
3-Pin Connector Cable	PCC-1A
Connector Cable for Auxiliary Heater	PCC-CN8-H
Duct Adapter	PD-150D
Relay and 3-Pin Connector Kit	PSC-5RA
Motion Sensor Kit (for 2-Way Cassette)	SOR-NED
Remote Sensor (Control)	THM-R2A

#### NOTES

- 1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
- 2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

# INDOOR UNITS

## 4-WAY MINI CASSETTE (NON-DUCTED)

Mini-cassette indoor units are designed to meet a variety of building requirements in energy-efficient, quiet packages. Compact size enables installation in tight spaces.



Capacity is 8,000 to 18,000 Btu/hr



#### **Key features**

- Electrical/blower/coil can be accessed through the bottom of the unit, service access adjacent to IDU is not required
- High-performance and highefficiency heat exchanger
- Efficient turbo fan for low-noise performance
- Wide range of air flow settings
- Motorized two-, three- or fourchannel air flow louvers with louver kit
- Auxiliary/emergency heater control

- Cooling and heating autochangeover dual-setpoint control
- Setback temperature control
- GentleCool feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy

					-	,							
Tonnage				c	).7	1	.0	1.	.3	1.	5		
4-Way Mini-Ca	assette Indoor Unit	t Model#		HICM008B21S HICM012B21S				HICM0:	15B21S	HICM01	.8B21S		
Power Supply							AC 1Phase, 208	3/230V, 60Hz					
Nominal Coolir	ng Capacity <sup>1</sup>	Btu / h	(kW)	8,000	(2.3)	12,000	(3.5)	15,000	(4.4)	18,000	(5.3)		
Nominal Heati	ng Capacity <sup>1</sup>	Btu / h	(kW)	9,000	(2.6)	13,500	(4.0)	17,000	(5.0)	20,000	(5.9)		
Sound Pressur (Overall A Scale	e Level <sup>2</sup> e) (Hi2-Hi-Me-Lo)	dB		38-34-	30-24.5	41-37-	33-27.5	45-39-	-35-31	47-43-	39-35		
Outer Dimensions	Height	in.	(mm)	11-1/4	(285)	11-1/4	(285)	11-1/4	(285)	11-1/4	(285)		
Difficusions	Width	in.	(mm)	22-7/16	(570)	22-7/16	(570)	22-7/16	(570)	22-7/16	(570)		
	Depth	in.	(mm)	22-7/16	(570)	22-7/16	(570)	22-7/16	(570)	22-7/16	(570)		
Net Weight		lbs.	(kg)	35	(16)	35	(16)	37	(17)	37	(17)		
Refrigerant							R410	)A					
Indoor Fan	Airflow Rate	cfm		424-353	424-353-300-212		-335-247	530-424-	353-282	565-494-	424-353		
	(Hi2-Hi-Me-Lo)	(m³/min)		(12-10	)-8.5-6)	(13-11	L-9.5-7)	(15-12	-10-8)	(16-14-	12-10)		
Motor Nominal	Output	W		í	57	Ē	57	5	7	57			
Connections													
Refrigerant Pip	ing					Flare	-Nut Connection	ion (with Flare Nuts)					
	Liquid Line	in.	(mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)		
	Gas Line	in.	(mm)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)	5/8	(15.88)		
Condensate Drain	OU	in.	(mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)		
Adaptable Pan	el Model						P-AP56	NAM					
Color							Neutral	White					
Outer	Height	in.	(mm)		1-3/	16			(30)				
Dimensions	Width	in.	(mm)	24-13/32			(620	)					
	Depth	in.	(mm)		24-13/32				(620)				
Net Weight		lbs.	(kg)		6			(3)					

#### NOTES

- $1. \ Nominal\ capacity\ conditions\ are\ based\ on\ AHRI\ standard.\ Visit\ www.ahrinet.org\ for\ more\ information.$
- 2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

4-Way Mini Cassette	
Compatible Accessories	HICM008-018B21S
IR Receiver Kit	CMIRK01
3-Pin Connector Cable	PCC-1A
Connector Cable for Auxiliary Heater	PCC-CN8-H
Duct Adaptor	PD-75C
Relay and 3-Pin Connector Kit	PSC-5RA
Motion Sensor Kit (for Mini 4-Way Cassette)	SOR-NEC
Remote Sensor (Control)	THM-R2A

### INDOOR UNITS JAWAY CASSETTE

# 4-WAY CASSETTE (NON-DUCTED)

Ceiling-mounted 4-Way Cassettes measuring  $33 \times 33$  inch ( $84 \times 84$  cm) are offered with standard decorative panels. Compact, thin and lightweight, they are easy to install even in tight spaces.







Capacity is 8,000 to 48,000 Btu/hr

4-Way Cassette IDU is compatible with silent-iconic panel

Tonnage			0	.7	1	.0	1	.3	1.5				
4-Way Cassette Ind	oor Unit Model#		HIC400	08B21S	HIC40	12B21S	HIC40:	15B21S	HIC401	8B21S			
Power Supply			AC 1Phase, 208/230V, 60Hz										
Nominal Cooling Cap	pacity <sup>1</sup>	Btu/h	8,000		12,	000	15,000		18,0	000			
			(2	.3)	(3	.5)	(4	.4)	(5.	3)			
Nominal Heating Cap	pacity <sup>1</sup>	Btu/h	9,0	000	13,	500	17,	000	20,0	000			
		(kW)	(2	.6)	(4	.0)	(5	.0)	(5.	8)			
Sound Pressure Leve (Overall A Scale) (Hi2		dB	33-30	-28-27	35-31	-30-27	37-32-30-27		42-36-32-28				
Outer Dimensions	Height	in. (mm)	9-3/4	(248)	9-3/4	(248)	9-3/4	(248)	9-3/4	(248)			
	Width	in. (mm)	33-1/16	(840)	33-1/16	(840)	33-1/16	(840)	33-1/16	(840)			
	Depth	in. (mm)	33-1/16	(840)	33-1/16	(840)	33-1/16	(840)	33-1/16	(840)			
Net Weight		lbs. (kg)	44	(20)	46	(21)	46	(21)	48	(22)			
Refrigerant						R41	0A						
Indoor Fan	Airflow Rate	cfm	530-459	-388-318	741-600	-494-388	777-600	-494-388	953-777-	635-494			
	(Hi2-Hi-Me-Lo)	(m³/min)	(15-13	3-11-9)	(21-17	-14-11)	(22-17	-14-11)	(27-22-	18-14)			
Motor Nominal Outp	ut	W	5	7	5	7	5	7	5	7			
Connections													
Refrigerant Piping					Flare	-Nut Connectio	on (with Flare N	uts)					
	Liquid Line	in.(mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)			
	Gas Line	in.(mm)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)	5/8	(15.88)			
Condensate Drain	OU	in.(mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)			

#### NOTES:

The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units.
 The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

4-Way Cassette	
Compatible Accessories	HIC4008-48B21S
Filter Box	B-160H3
IR Receiver Kit	C4IRK01
Fresh Air Intake Kit (for 4-Way Cassette)	OACI-160K3
3-Pin Connector Cable	PCC-1A
Connector Cable for Auxiliary Heater	PCC-CN8-H
Duct Adapter	PD-75A
Air Outlet Shutter Plate	PI-160LS2
Relay and 3-Pin Connector Kit	PSC-5RA
Remote Sensor (Control)	THM-R2A
T-Tube Connecting Kit	TKCI-160K

<sup>1.</sup> Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.

# INDOOR UNITS\_\_

# 4-WAY CASSETTE (NON-DUCTED) (CONTINUED)

#### **Key features**

- Electrical/blower/coil can be accessed through the bottom of the unit, service access adjacent to IDU is not required
- Multiple fan speed settings
- Air filter included
- Four air volume settings including Ultra Hi for higher ceilings
- Four-way airflow standard but can be configured for two-way or three-way
- Integrated condensate pumps in all units

- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating autochangeover dual-setpoint control
- GentleCool feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling
- Sensor enables remote reading of air supply temperature

- Motorized two-, three- or fourchannel air flow louvers with louver kit
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy
- Optional fresh air kit available

Tonnage			າ	.0	2	.5	3.	0	Δ	.0			
4-Way Cassette Inc	doorUnit Model#			 24B21S			HIC403		HIC404				
Power Supply	door offic model#		AC 1Phase, 208/230V, 60Hz										
Nominal Cooling Capacity <sup>1</sup> Btu/h		Btu/h	24	000	30	000	36,	000	48,000				
rtorimiat gooting ou	pacity	(kW)		.0)	(8		(10		(14.1)				
Nominal Heating Ca	nacity <sup>1</sup>	Btu/h	,	000	,	000	40,		,	000			
Nominat Heating Ca	pacity	(kW)			· · · · · · · · ·	).0)			· · · · · · · · ·				
Sound Pressure Level <sup>2</sup> (Overall A Scale) (Hi2-Hi-Me-Lo)		dB	(7.9) 42-36-32-28		48-43-39-33		(11.7) 48-45-40-35		(15.8) 48-46-41-37				
Outer Dimensions	Height	in. (mm)	11-3/4	(298)	11-3/4	(298)	11-3/4	(298)	11-3/4	(298)			
	Width	in. (mm)	33-1/16	(840)	33-1/16	(840)	33-1/16	(840)	33-1/16	(840)			
	Depth	in. (mm)	33-1/16	(840)	33-1/16	(840)	33-1/16	(840)	33-1/16	(840)			
Net Weight		lbs. (kg)	57	(26)	57	(26)	57	(26)	57	(26)			
Refrigerant				*		R4	10A						
Indoor Fan	Airflow Rate	cfm	953-812	-635-494	1306-109	4-847-706	1306-116	5-918-741	1306-123	6-988-777			
	(Hi2-Hi-Me-Lo)	(m³/min)	(27-23	-18-14)	(37-31	-24-20)	(37-33-	-26-21)	(37-35	-28-22)			
Motor Nominal Outp	out	W	5	57	13	27	12	27	12	27			
Connections													
Refrigerant Piping					Flar	e-Nut Connecti	on (with Flare N	uts)					
	Liquid Line	in.(mm)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)			
	Gas Line	in.(mm)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)			
Condensate Drain	OU	in.(mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)			

#### NOTES

1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.

2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

			Stan	dard	Silent-Iconic
Adaptable Panel Model			P-AP160NA2 (without Motion and Radiant Heat Sensors)	P-AP160NAE1 (with Motion and Radiant Heat Sensors)	P-GP160NAP
(applies to all mod	dels)				
Color				Neutral White	
Outer Dimensions	Height	in.(mm)	1-9/16 (40)	1-9/16 (40)	2-1/16 (52)
	Width	in.(mm)	37-3/8 (950)	37-3/8 (950)	37-3/8 (950)
	Depth	in.(mm)	37-3/8 (950)	37-3/8 (950)	37-3/8 (950)
Net Weight		lbs(kg)	14 (6.5)	14 (6.5)	19 (8.5)

# INDOOR UNITS

### CEILING SUSPENDED

(NON-DUCTED)

Ceiling Suspended indoor units have a stylized design and color that make them among the most elegant units on the market. Units are equipped with an automatic swing louver to ensure even air distribution.



Capacity is 15,000 to 36,000 Btu/hr



#### **Key features**

- New fan design for high efficiency and low noise
- Flexible installation for high ceilings
- Cooling and heating autochangeover dual-setpoint control
- Setback temperature control
- Auxiliary/emergency heater control
- Sensor enables remote reading of air supply temperature
- GentleCool feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling
- Optional energy-saving motion and radiant heat sensor for optimized airflow and temperature control in response to room occupancy

Tonnage				1	.3	2	.0	2	.5	3	.0
Ceiling Suspende	d Indoor Uni	t Model #		HICS015B2(1,2)S HICS024B2(1,2)S			B2(1,2)S	HICS030	B2(1,2)S	HICS036	B2(1,2)S
Power Supply							AC 1Phase, 20	08/230V, 60Hz			
Nominal Cooling Ca	apacity <sup>1</sup>	Btu / h	(kW)	15,000	(4.4)	24,000	(7.0)	30,,000	(8.8)	36,000	(10.5)
Nominal Heating Ca	apacity <sup>1</sup>	Btu / h	(kW)	17,000	(5.0)	27,000	(7.9)	34,000	(10.0)	40,000	(11.7)
Sound Pressure Lev (Overall A Scale) (Hi		dB		38-35	-31-28	43-40	-36-31	44-42-	-37-32	48-45	-41-35
Outer Dimensions	Height	in.	(mm)	9-1/4	(235)	9-1/4	(235)	9-1/4	(235)	9-1/4	(235)
	Width	in.	(mm)	37-13/16	(960)	50	(1270)	62-3/16	(1580)	62-3/16	(1580)
	Depth	in.	(mm)	27-3/16	(690)	27-3/16	(690)	27-3/16	(690)	27-3/16	(690)
Net Weight		lbs.	(kg)	59	(27)	77	(35)	90	(41)	90	(41)
Refrigerant						,	R4.	10A		·	,
Indoor Fan	Airflow Rate		cfm	530-459	-388-318	847-741	-635-512	1059-935	-777-600	1236-109	4-900-706
	(Hi2-Hi-Me-L	.0)	(m3/min)	(15-13	3-11-9)	(24-21-	18-14.5)	(30-26.5	5-22-17)	(35-31-2	25.5-20)
Motor Nominal Out	put		W	5	0	8	0	16	60	16	60
Connections								,			
Refrigerant Piping						Flar	e-Nut Connecti	on (with Flare N	uts)		
	Liquid Line		in. (mm)	1/4	(6.35)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)
	Gas Line		in. (mm)	1/2	(12.70)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)
Condensate Drain	OU		in. (mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)

#### NOTES

- Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
   The sound pressure level is based on the following.
- The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

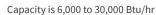
	Ceiling Suspende	ed	
Compatible Accessories	HICS015B2(1,2)S	HICS024B2(1,2)S	HICS030-036B2(1,2)S
Filter Box	B-56MP	B-90MP	B-160MP
IR Receiver Kit	CSIRK01	CSIRK01	CSIRK01
Condensate Pump Kit	DUPC-63K1	DUPC-160K1	DUPC-160K1
3-Pin Connector Cable	PCC-1A	PCC-1A	PCC-1A
Connector Cable for Auxiliary Heater	PCC-CN8-H	PCC-CN8-H	PCC-CN8-H
Duct Adapter	PD-100	PD-100	PD-100
Relay and 3-Pin Connector Kit	PSC-5RA	PSC-5RA	PSC-5RA
Motion Sensor Kit (for Ceiling Suspended)	SOR-NEP	SOR-NEP	SOR-NEP
Remote Sensor (Control)	THM-R2A	THM-R2A	THM-R2A

# INDOOR UNITS WALL MOUNT

WALL MOUNT (NON-DUCTED)

Wall Mount indoor units include wide-angle louvers that distribute airflow comfortably. An auto-swing function ensures efficient air distribution and uniform temperature throughout the conditioned space. Condensate piping can be connected at the right, left or rear of the unit for ease of installation.







Tonnage			0.	.5	0.	.7	1.	0		:	1.3	
Wall Mount Indoor	Unit Model #		TIWM006	B2(1,2)S	TIWM008	BB2(1,2)S	TIWM012	B2(1,2)S	TIWM0	15B21S	TIWM0	15B22S
Power Supply							AC 1Phase, 2	08/230V, 60H	Z			
Nominal Cooling Cap	pacity <sup>1</sup>	Btu/h	6,0	00	8,0	000	12,	000	15,000			
		(kW)	(1.	.8)	(2	.3)	(3.	5)		(4	4.4)	
Nominal Heating Ca	pacity <sup>1</sup>	Btu/h	6,7	00	9,0	000	13,	500		17	7,000	
		(kW)	(2.	.0)	(2	.6)	(4.	0)		(.	5.0)	
Sound Pressure Leve (Overall A Scale) (Hiz		dB	39-35-	-32-30	39-35-32-30		46-40-36-33		42-40	-38-33	40-37-34-31	
Outer Dimensions	Height	in.(mm)	11-13/16	(300)	11-13/16	(300)	11-13/16	(300)	13-1/8	(333)	11-13/16	(300)
	Width	in.(mm)	31-1/8	(790)	31-1/8	(790)	35-7/16	(900)	45-1/4	(1150)	43-5/16	(1100)
	Depth	in.(mm)	9-1/16	(230)	9-1/16	(230)	9-1/16	(230)	9-5/8	(245)	10-1/4	(260)
Net Weight		lbs.(kg)	22	(10)	22	(10)	24	(11)	35	(16)	32	(15)
Refrigerant			R410A									
Indoor Fan	Airflow Rate	cfm	353-282-	247-229	353-282-247-229		494-388-318-265		530-494-459-353		512-459-388-335	
	(Hi2-Hi-Me-Lo)	(m³/min)	(10-8-	7-6.5)	(10-8-7-6.5)		(14-11	-9-7.5)	(15-14	-13-10)	(14.5-13	3-11-9.5)
Motor Nominal Outp	out	W	3	8	3	8	3	8			38	
Connections												
Refrigerant Piping						Flare	-Nut Connecti	on (with Flar	e Nuts)			
	Liquid Line	in.(mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)
	Gas Line	in.(mm)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)
Condensate Drain	OU	in.(mm)	7/8	(22)	7/8	(22)	7/8	(22)	7/8	(22)	7/8	(22)
	IU	in.(mm)	5/8	(16)	5/8	(16)	5/8	(16)	5/8	(16)	5/8	(16)

# WALL MOUNT (NON-DUCTED) (CONTINUED)

#### ,

Key featuresRemovable front panel for

easy cleaning

- Built-in wireless sensor for use with optional wireless zone controller.
- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating auto-changeover dual-setpoint control
- GentleCool feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling
- Sensor enables remote reading of air supply temperature
- Optional condensate pump

Tonnage				1	5			2	1.0				1.5	
Wall Mount Indoor	Unit Model #		TIWM0:	18B21S	TIWM0:	18B22S	TIWM0	24B21S	TIWM02	24B22S	TIWM0	30B21S	TIWM03	30B22S
Power Supply			AC 1Phase, 208/230V, 60Hz											
Nominal Cooling Cap	pacity <sup>1</sup>	Btu/h		18,	000			24	,000		30,000			
		(kW)		(5	.3)			(7	7.0)			3)	3.8)	
Nominal Heating Ca	pacity <sup>1</sup>	Btu/h		20,	000			27	,000			34	,000	
		(kW)		(5	.8)			(7	7.9)			(1	0.0)	
Sound Pressure Leve (Overall A Scale) (Hi		dB	49-43-	40-36	45-42-38-35		51-49	51-49-46-41		42-38	51-49	-46-41	51-48-44-39	
Outer Dimensions	Height	in.(mm)	13-1/8	(333)	11-13/16	(300)	13-1/8	(333)	11-13/16	(300)	13-1/8	(333)	11-13/16	(300)
	Width	in.(mm)	45-1/4	(1150)	43-5/16	(1100)	45-1/4	(1150)	43-5/16	(1100)	45-1/4	(1150)	43-5/16	(1100)
	Depth	in.(mm)	9-5/8	(245)	10-1/4	(260)	9-5/8	(245)	10-1/4	(260)	9-5/8	(245)	10-1/4	(260)
Net Weight		lbs.(kg)	37	(17)	33	(15)	37	(17)	33	(15)	37	(17)	33	(15)
Refrigerant								R4	10A					
Indoor Fan	Airflow Rate	cfm	671-600-	494-424	653-582-	494-423	777-671-600-530 759-670-582-494			777-671-600-530 812-706-618			618-512	
	(Hi2-Hi-Me-Lo)	(m³/min)	(19-17-	14-12)	(18.5-16.	5-14-12)	(22-19	-17-15)	(21.5-19-	16.5-14)	(22-19	-17-15)	(23-20-17	7.5-14.5)
Motor Nominal Outp	ut	W		3	38		38				38			
Connections														
Refrigerant Piping						Flare-Nu	t Connect	ion (with Fla	re Nuts)					
	Liquid Line	in.(mm)	3/8 (9.52)		3/8 (9.52)				3/8 (9.52)					
	Gas Line	in.(mm)	5/8 (15.88)		5/8 (15.88)			5/8 (15.88)						
Condensate Drain	OU	in.(mm)		7/8	(22)			7/8	(22)		7/8 (22)			
	IU	in.(mm)		5/8	(16)			5/8	(16)		5/8 (16)			

#### NOTES:

The sound pressure level is based on the following conditions:
 3.3ft (1m) Front of the Unit and 3.3ft (1m) Below the Unit.
 The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Wall Mount Indoor Unit		
Compatible Accessories	TIWM006-015B2(1,2)S	TIWM018-030B2(1,2)S
Infrared (IR) Receiver Kit	CWDIRK01	CWDIRK01
Strainer Kit	MSF-NP63A	MSF-NP112A
3-Pin Connector Cable	PCC-1A	PCC-1A
Connector Cable for Auxiliary Heater	PCC-CN8-H	PCC-CN8-H
Relay and 3-Pin Connector Kit	PSC-5RA	PSC-5RA
Remote Sensor (Control)	THM-R2A	THM-R2A
Condensate Drain Pump	DPWM-83819	DPWM-83819

Nominal capacity conditions are based on AHRI standard.
 Visit www.ahrinet.org for more information.

# FLOOR EXPOSED (NON-DUCTED)

Floor Exposed indoor units have a slim-line design compatible with the style of the room.



Capacity is 6,000 to 15,000 Btu/hr



#### **Key features**

- 8.7-inch (220 mm) depth preserves room space
- 24.8-inch height leaves ample window space
- Ideal for perimeter zone air conditioning
- Setback temperature control
- Sensor enables remote reading of air supply temperature
- Auxiliary/emergency heater control
- Cooling and heating auto-changeover dualsetpoint control

Tonnage				0	.5	0	.7	1	.0	1.	.3	
Floor Exposed Indo	or Unit Model	#		HIFE0	06B21S	HIFE00	08B21S	HIFE01	12B21S	HIFE01	.5B21S	
Indoor Unit Power Su	ıpply						AC 1Phase, 20	08/230V, 60Hz				
Nominal Cooling Cap	acity <sup>1</sup>	Btu / h	(kW)	6,000	(1.8)	8,000	(2.3)	12,000	(3.5)	15,000	(4.4)	
Nominal Heating Cap	acity <sup>1</sup>	Btu / h	(kW)	6,700	(2.0)	9,000	(2.6)	13,500	(4.0)	17,000	(5.0)	
Sound Pressure Leve (Overall A Scale) (Hi-		dB		39-3	33-29	39-33-29 43-35-32			48-4	3-36		
Outer Dimensions	Height	in.	(mm)	24-13/16	(630)	24-13/16	(630)	24-13/16	(630)	24-13/16	(630)	
	Width	in.	(mm)	41-1/8	(1045)	41-1/8	(1045)	46-1/16	(1170)	55-7/8	(1420)	
	Depth	in.	(mm)	8-11/16	(220)	8-11/16	(220)	8-11/16	(220)	8-11/16	(220)	
Net Weight		lbs.	(kg)	61	(28)	61	(28)	68	(31)	79	(36)	
Refrigerant							R4:	10A				
Indoor Fan	Airflow Rate		cfm	300-2	47-212	300-247-212		424-3	53-318	565-494-388		
	(Hi-Me-Lo)		(m³/min)	(8.5	-7-6)	(8.5	-7-6)	(12-	10-9)	(16-1	4-11)	
Motor Nominal Outp	ut		W	2	20	2	.0	2	8	4	5	
Connections												
Refrigerant Piping						Flar	e-Nut Connecti	on (with Flare N	luts)			
	Liquid Line	in.	(mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	
	Gas Line	in.	(mm)	1/2	(12.70)	1/2 (12.70)		1/2	(12.70)	1/2	(12.70)	
Condensate Drain	OU	in.	(mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	

#### NOTES:

- Nominal capacity conditions are based on AHRI standard.
   Visit www.ahrinet.org for more information.
   The sound pressure level is based on the following conditions:
- 2. The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the units. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.

Floor Exposed	
Compatible Accessories	HIFE006-015B21S
Infrared (IR) Receiver Kit	CWDIRK01
3-Pin Connector Cable	PCC-1A
Connector Cable for Auxiliary Heater	PCC-CN1925-H
Relay and 3-Pin Connector Kit	PSC-5RA
Remote Sensor (Control)	THM-R2A

# UNDOOR UNITS DUCTED HIGH STATIC

These indoor units now feature higher static pressure: Up to 0.8" for 1.3 - 4.5 ton units and up to 1.16" for six- and eight-ton units.



Capacity is 15,000 to 96,000 Btu/hr



Tonnage			1	.3	1	.5	2	.0	2	.3	2	.5
Ducted High Static	Indoor Unit Mod	el#	HIDH015	B2(2,3)S	HIDH018	BB2(2,3)S	HIDH024	B2(2,3)S	HIDH027	B2(2,3)S	HIDH030	)B2(2,3)S
Power Supply						F	AC 1 Phase, 20	08/230V, 60H	lz			
Nominal Cooling Cap	pacity <sup>1</sup>	Btu/h	15,	000	18,	18,000		24,000		000	30,	000
		(kW)	(4	.4)	(5.3)		(7.1)		(8.0)		(8.	.8)
Nominal Heating Ca	pacity <sup>1</sup>	Btu/h	17,	17,000		20,000		27,000		000	34,	000
		(kW)	(5.0)		(5	.9)	(8	.0)	(8	.8)	(10	0.0)
Sound Pressure Level <sup>2</sup> (Overall A Scale) (Hi2-Hi-Me-Lo)		dB	41-38-35-32		37-35	-32-30	40-37-	-34-32	40-37	-34-32	40-37-	-34-32
Outer Dimensions	Height	in.(mm)	11-13/16	(300)	11-13/16	(300)	11-13/16	(300)	11-13/16	(300)	11-13/16	(300)
_	Width	in.(mm)	27-9/16	(700)	41-5/16	(1050)	41-5/16	(1050)	41-5/16	(1050)	55-1/8	(1400)
	Depth	in.(mm)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)
Net Weight		lbs.(kg)	64	(29)	84	(38)	84	(38)	84	(38)	106	(48)
Refrigerant				R410A								
Indoor Fan	Airflow Rate	cfm	512-459	-388-335	653-582-512-424		759-671-582-494		759-671-582-494		1059-935	-812-706
	(Hi2-Hi-Me-Lo)	(m³/min)	(14.5-13	-11-9.5)	(18.5-16.5	5-14.5-12)	(21.5-19-	-16.5-14)	(21.5-19	-16.5-14)	(30-26.5-23-20)	
External Pressure <sup>3</sup> S	td (High1 - High2)	in. W.G.	0.2 (0.	4-0.8)	0.2 (0	.4-0.8)	0.2 (0.	4-0.8)	0.2 (0	4-0.8)	0.2 (0.	.4-0.8)
		(Pa)	(50 (10	0-200))	(50 (10	0-200))	(50 (10	0-200))	(50 (10	0-200))	(50 (10	0-200))
Motor Nominal Outp	out	W	15	57	19	90	19	90	19	90	2!	59
Connections												
Refrigerant Piping						Flare-1	Nut Connecti	on (with Flar	re Nuts)			
	Liquid Line	in.(mm)	1/4	(6.35)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)
	Gas Line	in.(mm)	1/2	(12.7)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)
Condensate Drain	OU	in. (mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)

Ducted High Static			
Compatible Accessories	HIDH015B2(2,3)S	HIDH018-027B2(2,3)S	HIDH030-054B2(2,3)S
Filter Box for Long-Life Filter	B-56LI	B-90LI	B-160LI
Infrared (IR) Receiver Kit	CWDIRK01	CWDIRK01	CWDIRK01
Long-Life Filter	F-56LI	F-90LI	F-160LI
3-Pin Connector Cable	PCC-1A	PCC-1A	PCC-1A
Connector Cable for Auxiliary Heater	PCC-6A	PCC-6A	PCC-6A
Relay and 3-Pin Connector Kit	PSC-5RA	PSC-5RA	PSC-5RA
Motion Sensor Kit (for Ducted Indoor Units)	SOR-NEZ	SOR-NEZ	SOR-NEZ
Seismic Suspension Bracket	_	_	_
Remote Sensor (Control)	THM-R2A	THM-R2A	THM-R2A

# DUCTED HIGH STATIC (CONTINUED)

#### **Key features**

- High-efficiency AC fan motor
- Multiple fan speed settings
- Access from underneath for easy service
- Built-in condensate pump
- Auxiliary/emergency heater control
- Sensor enables remote reading of air supply temperature
- Cooling and heating autochangeover dual-setpoint control
- GentleCool feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling



Capacity is 15,000 to 96,000 Btu/hr

Tonnage			3.	.0	4	.0	4.	.5		
Ducted High Static	Indoor Unit Mode	el#	HIDH036	6B2(2,3)S	HIDH048	BB2(2,3)S	HIDH054	B2(2,3)S		
Power Supply					AC 1 Phase, 2	08/230V, 60Hz	1			
Nominal Cooling Cap	acity <sup>1</sup>	Btu/h	36,	000	48,	000	54,	000		
		(kW)	(10	0.6)	(14	l.1)	(15.8)			
Nominal Heating Cap	acity <sup>1</sup>	Btu/h	40,	000	54,	000	60,000			
		(kW)	(11	8)	(15	5.8)	(17	7.6)		
Sound Pressure Leve (Overall A Scale) (Hi2- [(Hi-Lo) (208/230V) fo	-Hi-Me-Lo)	dB	42-39-	-36-33	44-40	-37-34	44-40-	-37-34		
Outer Dimensions	Height	in.(mm)	11-13/16	(300)	11-13/16	(300)	11-13/16	(300)		
Outer Dimensions  Net Weight	Width	in.(mm)	55-1/8	(1400)	55-1/8	(1400)	55-1/8	(1400)		
	Depth	in.(mm)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)		
Net Weight		lbs.(kg)	106	(48)	106	(48)	106	(48)		
Refrigerant					R4:	10A				
Indoor Fan	Airflow Rate	cfm	1183-104	1-918-777	1271-111	2-971-847	1271-1112-971-847			
	(Hi2-Hi-Me-Lo)	(m³/min)	(33.5-29.	.5-26-22)	(36-31.5	-27.5-24)	(36-31.5-27.5-24)			
External Pressure <sup>3</sup> St	d (High1-High2)	in. W.G.	0.2 (0.	4-0.8)	0.2 (0.	.4-0.8)	0.2 (0.	4-0.8)		
((Std (High)) (208/230	V) for 6.0, 8.0 Ton]	(Pa)	(50 (10	0-200))	(50 (10	0-200))	(50 (10	0-200))		
Motor Nominal Outp	ut	W	25	59	2.	59	25	59		
Connections										
Refrigerant Piping					Flare-Nut Connecti	on (with Flare Nuts)				
	Liquid Line	in.(mm)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)		
	Gas Line	in.(mm)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)		
Condensate Drain	OU	in. (mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)		

#### NOTES:

- 1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
- The sound pressure level is based on the following conditions:
   4.9 ft. (1.5m) beneath the unit. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- 3. The data indicates Standard Pressure Setting (High Pressure Setting 1- High Pressure Setting 2) values when a filter is not used. The sound pressure level is based on the Standard Pressure Setting.

# **DUCTED MEDIUM STATIC** These indoor units feature higher static pressure:

up to 0.6" for Medium Static Indoor Units.



Capacity is 6,000 to 54,000 Btu/hr



Tonnage			0	.5	0	.7	1	.0	1	.3	1	.5
Ducted Medium St	atic Indoor Unit Mo	odel #	HIDM0	06B23S	HIDM0	08B23S	HIDM0	12B23S	HIDM0	15B23S	HIDM0:	18B23S
Power Supply					'	Α	C 1 Phase, 2	08/230V, 60H	-lz			
Nominal Cooling Ca	pacity <sup>1</sup>	Btu/h	6,0	000	8,0	000	12,	000	15,	000	18,	000
		(kW)	(1.8)		(2	.4)	(3.	.6)	(4	.4)	(5	.3)
Nominal Heating Ca	pacity <sup>1</sup>	Btu/h	6,7	700	9,0	000	13,	500	17,	000	20,	000
	(kW)	(2	.0)	(2	.7)	(4.	.0)	(5	.0)	(5	.9)	
Sound Pressure Leve (Overall A Scale) (His		dB	32-30	-28-27	33-31	-31-29-28 38-35-32-30 40-37-34-31 37-		37-35	35-33-31			
Outer Dimensions	Height	in. (mm)	9-13/16	(250)	9-13/16	(250)	9-13/16	(250)	9-13/16	(250)	9-13/16	(250)
	Width	in. (mm)	27-9/16	(700)	27-9/16	(700)	27-9/16	(700)	27-9/16	(700)	41-5/16	(1050)
	Depth	in. (mm)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)
Net Weight		lbs. (kg)	57	(26)	57	(26)	60	(27)	60	(27)	79	(36)
Refrigerant				R410A								
Indoor Fan	Airflow Rate	cfm	300-265	-229-194	335-300-265-229		459-406-353-300		512-459	-388-335	653-582	-494-424
	(Hi2-Hi-Me-Lo)	(m³/min)	(8.5-7.5	-6.5-5.5)	(9.5-8.5-7.5-6.5)		(13-11.5-10-8.5)		(14.5-13-11-9.5)		(18.5-16.5-14-12	
External Pressure <sup>3</sup> S	td (High1-High2)	in. W.G.	0.2 (0	.4-0.6)	0.2 (0	.4-0.6)	0.2 (0.4-0.6)		0.2 (0.	.4-0.6)	0.2 (0.	4-0.6)
		(Pa)	(50 (10	0-150))	(50 (10	0-150))	(50 (10	0-150))	(50 (10	0-150))	(50 (100-150))	
Motor Nominal Outp	out	W	1	57	1!	57	15	57	1!	57	19	90
Connections					*		,					
Refrigerant Piping						Flare-N	lut Connecti	on (with Flai	re Nuts)			
	Liquid Line	in. (mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)
	Gas Line	in. (mm)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)	1/2	(12.7)	5/8	(15.88)
Condensate Drain	OU	in. (mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)

Ducted Medium Static			
Compatible Accessories	HIDM006-015B23\$	HIDM018-027B23\$	HIDM030-054B23S
Filter Box for Long-Life Filter	B-56LI	B-90LI	B-160LI
Infrared (IR) Receiver Kit	CWDIRK01	CWDIRK01	CWDIRK01
Long-Life Filter	F-56LI	F-90LI	F-160LI
3-Pin Connector Cable	PCC-1A	PCC-1A	PCC-1A
Connector Cable for Auxiliary Heater	PCC-6A	PCC-6A	PCC-6A
Relay and 3-Pin Connector Kit	PSC-5RA	PSC-5RA	PSC-5RA
Motion Sensor Kit (for Ducted Indoor Units)	SOR-NEZ	SOR-NEZ	SOR-NEZ
Remote Sensor (Control)	THM-R2A	THM-R2A	THM-R2A

#### **Key features**

- High-efficiency DC fan motor
- Multiple fan speed settings
- Up to 0.6 in. WG static pressure
- Access from underneath for easy service and troubleshooting
- Built-in condensate pump
- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating autochangeover dual-setpoint control
- GentleCool feature enables discharge air temperature to be set, eliminating the rush of cold air that can occur when air conditioning first comes on for more comfortable cooling

Tonnage			2.	0	2	.3	2.	.5	3	.0	4.	0	4	.5
Ducted Medium St	atic Indoor Unit I	Model#	HIDM02	24B23S	HIDM0	27B23S	HIDM03	30B23S	HIDM0	36B23S	HIDM04	18B23S	HIDM0	54B23S
Power Supply							AC	1 Phase, 2	08/230V, 60	)Hz			1	
Nominal Cooling Cap	pacity <sup>1</sup>	Btu/h	24,000		27,	27,000		30,000		36,000		48,000		000
		(kW)	(7.1)		(8	.0)	(8.	.8)	(10	).6)	(14	.1)	(15.8)	
Nominal Heating Ca	pacity <sup>1</sup>	Btu/h	27,0	000	30,	000	34,0	000	40,	000	54,0	000	60,	000
		(kW)	(8.0)		(8	.8)	(10	0.0)	(11	1.8)	(15	.8)	(17	7.6)
Sound Pressure Level <sup>2</sup> (Overall A Scale) (Hi2-Hi-Me-Lo)		dB	39-37-	34-32 39-37-34-32		40-38-35-32		42-39	42-39-36-34		37-34	43-40-37-34		
Outer Dimensions	Height	in.(mm)	9-13/16	(250)	9-13/16	(250)	9-13/16	(250)	9-13/16	(250)	9-13/16	(250)	9-13/16	(250)
	Width	in.(mm)	41-5/16	(1050)	41-5/16	(1050)	55-1/8	(1400)	55-1/8	(1400)	55-1/8	(1400)	55-1/8	(1400)
	Depth	in.(mm)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)
Net Weight		lbs.(kg)	79	(36)	79	(36)	97	(44)	97	(44)	97	(44)	97	(44)
Refrigerant								R4	10A					
Indoor Fan	Airflow Rate	cfm	759-671-	582-494	759-671-582-494		1059-935-812-706		1183-1041-918-777		1271-1112-971-847		7 1271-1112-971-8	
	(Hi2-Hi-Me-Lo)	(m3/min)	(21.5-19-	16.5-14)	(21.5-19	-16.5-14)	(30-26.5-23-20)		(33.5-29.5-26-22)		(36-31.5-27.5-24		) (36-31.5-27.5-24	
External Pressure <sup>3</sup> S	td (High1-High2)	in. W.G.	0.2 (0.	4-0.6)	0.2 (0	.4-0.6)	0.2 (0.	0.2 (0.4-0.6)		0.2 (0.4-0.6)		4-0.6)	0.2 (0	.4-0.6)
		(Pa)	(50 (10	0-150))	(50 (10	0-150))	(50 (10	0-150))	(50 (10	0-150))	(50 (10	0-150))	(50 (10	0-150))
Motor Nominal Outp	ut	W	19	0	1	90	25	59	2.	59	25	59	2.5	59
Connections														
Refrigerant Piping							Flare-Nu	t Connecti	on (with Flare Nuts)					
	Liquid Line	in.(mm)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)
	Gas Line	in.(mm)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)
Condensate Drain	OU	in. (mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)

#### NOTES:

- Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
- The sound pressure level is based on the following conditions: 4.9 ft. (1.5m) beneath the unit. The above data was measured in an anechoic chamber so that reflected sound should be taken into consideration in the field.
- The data indicates Standard Pressure Setting (High Pressure Setting 1 - High Pressure Setting 2) values when a filter is not used. The sound pressure level is based on the Standard Pressure Setting.

# DUCTED MEDIUM STATIC (CONVENTIONAL TYPE)

#### **Key features**

- High-efficiency DC fan motor
- Multiple fan speed settings
- Up to 0.32 in. WG static pressure
- Access from underneath for easy service and troubleshooting
- Built-in condensate pump

Tonnage			0.	.5	0.	7	1.	.0	1.	.3	1.	.5	2.	0	2.	.5	3	0	4.	.0		
Ducted Medi Unit Model #		ndoor	HIDM00	06B21S	HIDM00	)8B21S	HIDM0:	12B21S	HIDM0:	15B21S	HIDM0:	18B21S	HIDM02	4B21S	HIDM03	30B21S	HIDM0:	36B21S	HIDM04	48B21S		
Power Supply	,									AC 1 F	hase, 20	08/230V	, 60Hz									
Nominal Cool	ing	Btu/h	6,0	000	8,0	00	12,	12,000 15,000		000	18,000		24,000		30,000		36,	000	48,000			
Capacity 1		(kW)	(1.	.8)	(2.3)		(3.5)		(4.	(4.4)		(5.3)		0)	(8.	.8)	(10.5)		(14.1)			
Nominal Heat	ing	Btu/h	6,7	'00	9,0	00	13,	500	17,0	000	20,	000	27,0	000	34,0	000	40,	000	54,	000		
Capacity 1 (		(kW)	(2.	.0)	(2.	6)	(4.	.0)	(5.	.0)	(5.	.9)	(7.	9)	(10	0.0)	(11	.7)	(15	5.8)		
	Sound Pressure Level <sup>2</sup> (Overall A Scale) dB (Hi2-Hi-Me-Lo)		34-32-	-29-26	34-32-29-26 38-36-3		-34-30	39-36-33-28		42-40-	-37-29	38-35-	33-29	42-39-	-36-32	44-41	39-33	46-44	-40-34			
Outer Dimensions	Height	in.(mm)	10-5/8	(270)	10-5/8	(270)	10-5/8	(270)	10-5/8	(270)	10-5/8	(270)	11- 13/16	(300)	11- 13/16	(300)	11- 13/16	(300)	11- 13/16	(300)		
	Width	in.(mm)	25-9/16	(650)	25-9/16	(650)	25-9/16	(650)	35-7/16	(900)	35-7/16	(900)	43-5/16	(1100)	43-5/16	(1100)	55-1/8	(1400)	55-1/8	(1400)		
	Depth	in.(mm)	28-3/8	(720)	28-3/8	(720)	28-3/8	(720)	28-3/8	(720)	28-3/8	(720)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)	31-1/2	(800)		
Net Weight		lbs.(kg)	53	(24)	53	(24)	53	(24)	66	(30)	66	(30)	93	(44)	93	(44)	108	(49)	(49) 108			
Refrigerant											R4.	10A										
Indoor Fan	Airflow Rate	cfm	318-282-240- 205		318-282-240- 205		424-388-353- 282		512-459-406- 335		671-600-530- 388		883-812-741- 600		1094-98 74		3- 1253-1147- 1041-830		1377- 1094	1236- I-847		
	(Hi2-Hi- Me-Lo)	(m³/ min)	(9-8-6	.8-5.8)	(9-8-6.	8-5.8)	(12-11	-10-8)	(14.5-13-11.5- 9.5)		(19-17-15-11)		(25-23-21-17)		) (31-28-25-2		(31-28-25-21)		(35.5-32 23	.5-29.5- .5)	(39-35-	-31-24)
External Press		in. W.G.	0.2 (0.3	2-0.14)	0.2 (0.3	2-0.14)	0.2 (0.3	2-0.14)	0.2 (0.3	2-0.14)	0.2 (0.3	2-0.14)	0.2 (0.3	2-0.14)	0.2 (0.3	2-0.14)	0.2 (0.3	2-0.14)	0.2 (0.3	32-0.14)		
(High1-High2)	)	(Pa)	(50 (8	0-35))	(50 (80	)-35))	(50 (8	0-35))	(50 (8	0-35))	(50 (8	0-35))	(50 (8	)-35))	(50 (8	0-35))	(50 (8	0-35))	(50 (8	0-35))		
Motor Nomina	al Output	W	15	50	15	0	15	50	15	50	15	50	25	0	25	50	25	50	25	50		
Connections																						
Refrigerant Pi	ping								Flar	Flare-Nut Connection (with Flare Nuts)												
	Liquid Line	in.(mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)		
	Gas Line	in.(mm)	5/8	(15.88)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)		
Condensate Drain	OU	in. (mm)	1-1/4	1 (32)	1-1/4	(32)	1-1/4	1-1/4 (32)		(32)	1-1/4	1 (32)	1-1/4 (32)		1-1/4 (32)		1-1/4 (32)		1-1/4 (32)			

# **DUCTED SLIM**



Capacity is 6,000 to 18,000 Btu/hr



#### **Key features**

- High-efficiency DC fan motor
- Multiple fan speed settings
- Up to .20 in. WG static pressure
- Access from underneath for easy service and troubleshooting
- Built-in condensate pump
- Setback temperature control
- Auxiliary/emergency heater control
- Cooling and heating autochangeover dual-setpoint control
- Sensor enables remote reading of air supply temperature

Tonnage			0.	5	0	.7	1	.0	1.	.3	1.	.5	
Ducted Slim Indoo	r Unit Model #		HIDS00	)6B21S	HIDS00	HIDS008B21S		HIDS012B21S		L5B21S	HIDS01	8B21S	
Power Supply			AC 1 Phase, 208/230V, 60Hz										
Nominal Cooling Ca	pacity <sup>1</sup>	Btu/h	6,000		8,0	8,000		12,000		15,000		000	
		(kW)	(1.	8)	(2	.3)	(3	.5)	(4.	.4)	(5.	.3)	
Nominal Heating Ca	pacity <sup>1</sup>	Btu/h	6,7	00	9,0	000	13,	500	17,	000	20,0	000	
		(kW)	(2.	0)	(2	.6)	(4	.0)	(5.	.0)	(5.	.9)	
Sound Pressure Leve (Overall A Scale) (Hi		dB	32-30-	29-27	32-30	-29-27	34-33.	5-33-32	36-35-	-33-32	40-38-36-34		
Outer Dimensions	Height	in.(mm)	7-9/16	(192)	7-9/16	(192)	7-9/16	(192)	7-9/16	(192)	7-9/16	(192)	
	Width	in.(mm)	35-3/4	(908)	35-3/4	(908)	35-3/4	(908)	46-3/8	(1178)	46-3/8	(1178)	
	Depth	in.(mm)	17-19/32	(447)	17-19/32	(447)	17-19/32	(447)	17-19/32	(447)	17-19/32	(447)	
Net Weight		lbs.(kg)	44	(20)	44	(20)	46	(21)	57	(26)	57	(26)	
Refrigerant			R410A										
Indoor Fan	Airflow Rate	cfm	318-289-	244-205	318-289-244-205		346-318-300-268		512-477-441-381		582-530-494-424		
	(Hi2-Hi-Me-Lo)	(m3/min)	(9-8-	7-6)	(9-8	-7-6)	(10-9	9-9-8) (15-14-13-11)		-13-11)	(17-15-	-14-12)	
External Pressure <sup>2</sup> St	d (High-Low)	in. W.G.	0.04 (0.1	L2-0.00)	0.04 (0.	12-0.00)	0.04 (0.	12-0.00)	0.04 (0.2	20-0.00)	0.04 (0.2	20-0.00)	
		(Pa)	(10 (3	30-0))	(10 (3	30-0))	(10 (3	30-0))	(10 (5	50-0))	(10 (5	50-0))	
Motor Nominal Outp	out	W	4	0	4	0	4	.0	6	0	6	0	
Connections													
Refrigerant Piping					Flare-Nu	t Connection	ı (with Flare	Nuts)					
	Liquid Line	in.(mm)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)	
	Gas Line	in.(mm)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)	1/2	(12.70)	5/8	(15.88)	
Condensate Drain	OU	in.(mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)	

- 1. Nominal capacity conditions are based on AHRI standard. Visit www.ahrinet.org for more information.
  2. Data values when a filter is not used.

Ducted Slim		
Compatible Accessories	HIDS006-012B21S	HIDS015-018B21S
Infrared (IR) Receiver Kit	CWDIRK01	CWDIRK01
Air Filter	KW-PP5Q	KW-PP6Q
3-Pin Connector Cable	PCC-1A	PCC-1A
Connector Cable for Auxiliary Heater Control	PCC-CN8-H	PCC-CN8-H
Relay and 3-Pin Connector Kit	PSC-5RA	PSC-5RA
Remote Sensor (Control)	THM-R2A	THM-R2A

# ECONOFRESH ECONOMIZER



The EconoFresh unit includes the Economizer Kit and a ducted Medium Static unit in a choice of three capacities: 30,000, 36,000 or 48,000 Btu/hr.



The exclusive EconoFresh unit is a combination of a ducted Medium Static unit paired with an Economizer Kit to provide up to 100 percent outside air/free cooling when conditions are favorable. Seamlessly integrating with VRF systems, the unit contributes to energy savings and improves air quality.

#### **Key features**

- Excellent for applications with cooling demand during mid seasons and winter
- Inputs for optional  $CO_2$  and enthalpy sensors are available for control based on indoor air quality or temperature/humidity
- Remote control setting of the outside air damper opening to ensure minimum outside airflow requirements are met
- Auxiliary/emergency heater control
- Setback temperature control
- Cooling and heating auto-changeover dual-setpoint control
- Sensor enables remote reading of air supply temperature

Tonnage			2	.5	3.		4	.0			
EconoFresh (Econor a ducted Medium S		- Model #	HIDM03	30 <b>B</b> 21E	HIDM03	36B21E	HIDM04	48B21E			
Power Supply			AC 1 Phase, 208/230V, 60Hz								
Nominal Cooling Cap	pacity *	Btu/h	30,000		36,000		48,000				
		(kW)	(8	.8)	(10	).5)	(14.1)				
Nominal Heating Cap	pacity *	Btu/h	34,	000	40,	000	54,	000			
		(kW)	(10	0.0)	(11	7)	(15	5.8)			
Sound Pressure Leve (Overall A Scale) (Hi-		dB	38-3	5-32	39-3	5-33	40-3	6-33			
Outer Dimensions	Height	in.(mm)	10-7/8	(275)	10-7/8	(275)	10-7/8	(275)			
	Width	in.(mm)	58-1/16	(1474)	58-1/16	(1474)	58-1/16	(1474)			
	Depth	in.(mm)	23-5/8	(600)	23-5/8	(600)	23-5/8	(600)			
Net Weight		lbs.(kg)	106	(48)	106	(48)	106	(48)			
Refrigerant					R4:	L0A					
Indoor Fan	Airflow Rate <sup>2</sup>	cfm	1059-953-847		1236-10	)94-988	1271-11	30-1024			
	(Hi-Me-Lo)	(m³/min)	(30-27-24)		(35-31-28)		(36-3	2-29)			
External Pressure <sup>2</sup>		in. W.G.	0.17-0.	12-0.10	0.16-0.11-0.10		0.12-0.	10-0.08			
(High-Med-Low)		(Pa)	(43-3	0-25)	(40-2	8-25)	(30-2	5-20)			
Motor Nominal Outp	ut	W	2.	50	25	50	250				
Connections											
Refrigerant Piping				Flare-N	lut Connecti	on (with Fla	re Nuts)				
	Liquid Line	in.(mm)	3/8	(9.52)	3/8	(9.52)		(9.52)			
	Gas Line	in.(mm)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)			
Condensate Drain OU		in.(mm)	1-1/4	(32)	1-1/4	(32)	1-1/4	(32)			
Adaptable EconoFresh Kit Model			EF-456NE								
			10 (	254)							
Width		in. (mm)			55-1/2	(1410)					
	Depth	in. (mm)			12-3/1	6 (270)					
	Net Weight	lbs. (kg)			28 (	12.5)					

EcoFresh	
Compatible Accessories	HIDM030-048B21E
Infrared (IR) Receiver Kit	CWDIRK01
Air Filter	KW-PP456E
3-Pin Connector Cable	PCC-1A
Connector Cable for Auxiliary Heater	PCC-CN8-H
Relay and 3-Pin Connector Kit	PSC-5RA
Remote Sensor (Control)	THM-R2A

#### NOTES:

- $1. \ \ Nominal\ capacity\ condition\ is\ based\ on\ AHRI\ standard.\ See\ www.ahrinet.org\ for\ more\ information.$
- 2. Data values when a filter is not used.

### INDOOR UNITS UNITED BALLET

### MULTI-AIR MULTI-POSITION AIR HANDLER (BUILT-IN CONTROL BOX TYPE)

#### Fit more spaces with greater ease

It's faster, easier and less expensive to solve application challenges with the new Multi-position AHU.

Available in capacities ranging from 0.7 to five tons, this unit provides a flexible solution for applications as diverse as single hotel rooms or entire houses.

Available in three sizes - small, medium and large - this unit provides the flexibility for installation in any upflow or horizontal application. Compact cabinets, along with return air options in both the upflow and horizontal positions allow this unit to fit into tight spaces such as closets, attics and crawl spaces.



#### **Key features**

- Pre-installed refrigerant components and point of power for all sizes
- Electrical components and expansion valve are built in and ready to go
- Available with factory installed electric heating coils
- Pre-painted steel on the top, coil and blower doors and heavy-gauge embossed galvanized steel cabinet casing resist corrosion and rust creep
- Insulated with one-inch R-4.5 insulation that delivers lasting performance and efficiency.
- Blowers are sized to circulate air both quietly and efficiently. The motor is four-tap constant torque motor (ECM)
- The rifled copper tube and aluminum fin coils produce high performance ratings and provide long-lasting quality by using the latest in heat transfer technology
- External static pressure can be selected for high (0.8 in. WG) or standard (0.4 in. WG)
- Connectable condensate pump is supplied in the field

### **MULTI-AIR MULTI-POSITION AIR HANDLER** (BUILT-IN CONTROL BOX TYPE)



Tonnage			0.7	Ton	1.0	Ton	1.5	Ton	2.0	Ton		
Model #			TIAH0	08B22M	TIAH0	12B22M	TIAH0:	L8B22M	TIAH02	24B22M		
Indoor Unit Power Supply	/	'				AC 1Phase, 2	08/230V, 60Hz					
Nominal Cooling Capacity <sup>1</sup> Btu		Btu/h	8,	000	12,000		18,000		24,	000		
(kW)		(kW)	(2	2.4)	(3	3.6)	(5	.3)	(7.1)			
Nominal Heating Capacit	y <sup>1</sup>	Btu/h	9,	000	13	,500	20,	000	27,	000		
		(kW)	(2	2.7)	(4	1.0)	(5	.9)	(8	.0)		
Sound Power Level <sup>2</sup> (Overall A Scale) (H-Lo)		dB	Т	BD	Т	BD	Т	3D	Т	3D		
Outer Dimensions	Height	in. (mm)	43	(1092)	43	(1092)	43	(1092)	43	(1092)		
	Width	in. (mm)	17-1/2	(445)	17-1/2	(445)	17-1/2	(445)	17-1/2	(445)		
	Depth	in. (mm)	21	(533)	21	(533)	21	(533)	21	(533)		
Net Weight		lbs. (kg)	96	(44)	98	(44)	106	(48)	106	(48)		
Refrigerant				R410A								
Indoor Fan	Airflow Rate	cfm	350	)-250	430-300		690-440		800-530			
	(Hi-Lo)	(m³/min)	(9.9	)-7.1)	(12.	2-8.5)	(19.5	-12.5)	(22.7-15.0)			
External Pressure 3		in. W.G.	0.4	-0.8	0.4	l-0.8	0.4	-0.8	0.4	-0.8		
(Standard-High)		(Pa)	(100	)-199)	(100	)-199)	(100	-199)	(100	-199)		
Motor Nominal Output		HP	1	./3	1	./3	1	/3	1	/3		
Connections							•					
Refrigerant Piping						Bra	zing					
	Liquid Line	in. (mm)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)	3/8	(9.52)		
	Gas Line	in. (mm)	1/2	(12.7)	1/2	(12.7)	5/8	(15.88)	5/8	(15.88)		
Condensate Drain	OD	in. (mm)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)		

#### NOTES:

Piping Length:

1 Nominal capacity is based on combinations within the VRF system under the following conditions:

24.6 ft. (7.5m)

Cooling operation conditions

Heating operation conditions Indoor Air Inlet Temperature: 70°F DB (21.1°C DB)

Indoor Air Inlet Temperature: 80°F DB (26.7°C DB

Outdoor Air Inlet Temperature: 47°F DB (8.3°C DB) 43°F WB (6.1°C WB)

67°F WB (19.4°C WB) Outdoor Air Inlet Temperature: 95°F DB (35.0°C DB)

- 2 The sound power level is based on AHRI 260. The sound data is measured when the External Static Pressure is High setting.
- 3 The data for external pressure indicates the values when a filter is not used.

### **MULTI-AIR MULTI-POSITION AIR HANDLER** (BUILT-IN CONTROL BOX TYPE) (CONTINUED)



Tonnage			2.5	Ton	3.0	Ton	4.0	Ton	5.0	Ton		
Model #			TIAH0	30B22M	TIAH0	36B22M	TIAH04	18B22M	TIAH06	50B22M		
Indoor Unit Power Supply	1	'				AC 1Phase, 2	08/230V, 60Hz					
Nominal Cooling Capacity 1 Btu		Btu/h	30,000		36,000		48,000		60,	000		
		(kW)	(3)	3.8)	(1	0.6)	(14.1)		(17.6)			
Nominal Heating Capacity	/ <sup>1</sup>	Btu/h	34	,000	40	,000	54,	000	64,000			
		(kW)	(1	0.0)	(1	1.8)	(15	5.8)	(18	3.8)		
Sound Power Level <sup>2</sup> (Overall A Scale) (H-Lo)		dB	Т	BD	Т	BD	TI	3D	TI	3D		
Outer Dimensions	Height	in. (mm)	48	(1219)	48	(1219)	58-3/4	(1492)	58-3/4	(1492)		
	Width	in. (mm)	21	(533)	21	(533)	24-1/2	(622)	24-1/2	(622)		
	Depth	in. (mm)	21	(533)	21	(533)	21-3/4	(553)	21-3/4	(553)		
Net Weight		lbs (kg)	126	(57)	126	(57)	168	(76)	168	(76)		
Refrigerant			R410A									
Indoor Fan	Airflow Rate	cfm	1000-700		1050-750		1520-1060		1800-1260			
	(Hi-Lo)	(m³/min)	(28.3	3-19.8)	(29.7-21.2)		(43.0-30.0)		(51.0-35.7)			
External Pressure <sup>3</sup>		in. W.G.	0.4	1-0.8	0.4	1-0.8	0.4	-0.8	0.4	-0.8		
(Standard-High)		(Pa)	(100	0-199)	(100	)-199)	(100	-199)	(100	-199)		
Motor Nominal Output		HP	:	L/2	1	1/2	3	/4	3	/4		
Connections												
Refrigerant Piping						Bra	zing					
	Liquid Line	in. (mm)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)		
	Gas Line	in. (mm)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	3/4	(19.05)		
Condensate Drain	OD	in. (mm)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)		

#### NOTES:

 $1\quad \hbox{Nominal capacity is based on combinations within the VRF system under the following conditions:}$ Cooling operation conditions

Indoor Air Inlet Temperature: 80°F DB (26.7°C DB 67°F WB (19.4°C WB)

Outdoor Air Inlet Temperature: 95°F DB (35.0°C DB) Piping Length: Piping Lift: 24.6 ft. (7.5m)

Heating operation conditions

Indoor Air Inlet Temperature: 70°F DB (21.1°C DB) Outdoor Air Inlet Temperature: 47°F DB (8.3°C DB)  $43^{\circ}\text{F WB} \, (6.1^{\circ}\text{C WB})$ 

- The sound power level is based on AHRI 260. The sound data is measured when the External Static Pressure is High setting.
   The data for external pressure indicates the values when a filter is not used.

Multi-Position Air Handler	(Built-in Contro	ol Box Type)							
Compatible Accessories		TIAH008,012B22M	TIAH018,024B22M	TIAH030,036B22M	TIAH048B22M	TIAH060B22M			
Filter Base Kit		86E	T0002	86ET0001	86ET0003				
Downflow Conversion Kit		DFK	(-S-JH	DFK-M-JH	DF	K-L-JH			
Electrical Heater Kit	2 kW	BSEHK-02B-JH	BSEHK-02B-JH	-	-	-			
	3 kW	-	BSEHK-03B-JH	BMEHK-03B-JH	-	-			
	5 kW	-	-	BMEHK-05B-JH	BLEHK-05B-JH	BLEHK-05B-JH			
	8 kW	-	-	-	BLEHK-08B-JH	BLEHK-08B-JH			
	10 kW	-	-	-	-	BLEHK-10B-JH			
Infrared Receiver (IR) Kit				CWDIRK01					
3-Pin Connector Cable				PCC-1A					
Relay and 3-Pin Connector Kit		PSC-5RA							
Remote Sensor (Control)				THM-R2A					

### **MULTI-AIR MULTI-POSITION AIR HANDLER** (BUILT-IN HEATER KIT)



Tonnage			0.7	Ton	1.0	Ton	1.5	Ton	2.0 Ton				
Model #			TIAH008	BB22M3H	TIAH01	2B22M3H	TIAH018	BB22M5H	TIAH024	B22M5H			
Indoor Unit Power Supply		'	AC 1Phase, 208/230V, 60Hz										
Nominal Cooling Capacity	, 1	Btu/h	8,000		12	12,000		,000	24,	000			
(kW)		(kW)	(2.4)		(3	(3.6)		(5.3)		.1)			
Nominal Heating Capacity	, <sup>1</sup>	Btu/h	9,	000	13	,500	20	,000	27,000				
		(kW)	(2	.7)	(4	1.0)	(5	i.9)	(8	.0)			
Heater Kit		(kW)	Built-In										
Output (240V)		-	3	.0	3	3.0	5	i.0	5	.0			
Sound Power Level *2 (Overall A Scale) (H-Lo)		dB	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD			
Outer Dimensions	Height	in. (mm)	43	(1092)	43	(1092)	43	(1092)	43	(1092)			
	Width	in. (mm)	17-1/2	(445)	17-1/2	(445)	17-1/2	(445)	17-1/2	(445)			
	Depth	in. (mm)	21	(533)	21	(533)	21	(533)	21	(533)			
Net Weight		lbs. (kg)	101	(46)	103	(47)	111	(50)	111	(50)			
Refrigerant			R410A										
Indoor Fan	Airflow Rate	cfm	350	-(na)	430-(n/a)		690-(n/a)		800-(n/a)				
	(Hi-Lo)	(m³/min)	3 (9.9	-(n/a))	3 (12.	2-(n/a))	3 (19.	5-(n/a))	3 (22.7	'-(n/a))			
External Pressure 3		in. W.G.	0.4	-0.8	0.4	l-0.8	0.4	-0.8	0.4	-0.8			
(Standard-High)		(Pa)	(100	-199)	(100	)-199)	(100	-199)	(100	-199)			
Motor Nominal Output		HP	1	/3	1	./3	1	/3	1	/3			
Connections													
Refrigerant Piping	rant Piping			Bra	azing								
	Liquid Line	in. (mm)	1/4	(6.35)	1/4	(6.35)	3/8	(9.52)	3/8	(9.52)			
	Gas Line	in. (mm)	1/2	(12.7)	1/2	(12.7)	5/8	(15.88)	5/8	(15.88)			
Condensate Drain	OD	in. (mm)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)			

#### NOTES:

 $1\quad \hbox{Nominal capacity is based on combinations within the VRF system under the following conditions:}$ Cooling operation conditions Heating operation conditions

Indoor Air Inlet Temperature: 70°F DB (21.1°C DB)

 $\begin{array}{ll} \mbox{Indoor Air Inlet Temperature:} & 80^{\circ}\mbox{F DB } (26.7^{\circ}\mbox{C DB} \\ & 67^{\circ}\mbox{F WB } (19.4^{\circ}\mbox{C WB}) \\ \mbox{Outdoor Air Inlet Temperature:} & 95^{\circ}\mbox{F DB } (35.0^{\circ}\mbox{C DB}) \end{array}$ 

Outdoor Air Inlet Temperature: 47°F DB (8.3°C DB)

43°F WB (6.1°C WB)

Piping Length: Piping Lift: 24.6 ft. (7.5m) 0ft. (0m)

 $2\,\,$  The sound power level is based on AHRI 260. The sound data is measured when the External Static Pressure is High setting.

3 The data for external pressure indicates the values when a filter is not used.

### **MULTI-AIR MULTI-POSITION AIR HANDLER** (BUILT-IN HEATER KIT) (CONTINUED)



Tonnage			2.5	Ton	3.0	) Ton	4.0 Ton		5.0 Ton				
Model #			TIAH030B22M8H	TIAH030B22M10H	TIAH036B22M8H	TIAH036B22M10H	TIAH048E	322M10H	TIAH060E	322M15H			
Indoor Unit Power Supply			AC 1Phase, 208/230V, 60Hz										
Nominal Cooling Capacity <sup>1</sup>	Nominal Cooling Capacity 1 Btu/h		30,000 30,000		36,000	36,000	48,0	000	60,0	000			
		(kW)	(8.8)	(8.8)	(10.6)	(10.6)	(14	4.1) (17.6)		.6)			
Nominal Heating Capacity <sup>1</sup>		Btu/h	34,000	34,000	40,000	40,000	54,0	000	64,000				
		(kW)	(10.0)	(10.0)	(11.8)	(11.8)	(15	.8)	(18	.8)			
Heater Kit		(1.14/)				Built-In							
Output (240V)		(kW)	8.0	10.0	8.0	10.0	10	.0	15	.0			
Sound Power Level *2 (Overall A Scale) (H-Lo)		dB	Т	BD	TBD TBD		TBD						
Outer Dimensions	Height	in. (mm)	48	(1219)	48	(1219)	58-3/4	(1492)	58-3/4	(1492)			
	Width	in. (mm)	21	(533)	21	(533)	24-1/2	(622)	24-1/2	(622)			
	Depth	in. (mm)	21	(533)	21	(533)	21-3/4	(553)	21-3/4	(553)			
Net Weight		lbs (kg)	131	(59)	131	(59)	173	(78)	173	(78)			
Refrigerant			R410A										
Indoor Fan	Airflow Rate	cfm	1000	)-(n/a)	1050-(n/a)		1050-(n/a)		1800-(n/a)				
	(Hi-Lo)	(m³/min)	3 (28.	3-(n/a))	3 (29	7-(n/a))	3 (29.7	-(n/a))	3 (51.0	-(n/a))			
External Pressure 3		in. W.G.	0.4	4-0.8	0.	4-0.8	0.4-	0.8	0.4-	0.8			
(Standard-High)		(Pa)	(100	0-199)	(10	0-199)	(100-	199)	(100-	199)			
Motor Nominal Output		HP	1	1/2		1/2	3/	4	3/	4			
Connections													
Refrigerant Piping					Brazing								
	Liquid Line	in. (mm)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)	3/8	(9.52)			
	Gas Line	in. (mm)	5/8	(15.88)	5/8	(15.88)	5/8	(15.88)	3/4	(19.05)			
Condensate Drain	OD	in. (mm)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)	3/4	(19.05)			

#### NOTES:

 $1\quad \hbox{Nominal capacity is based on combinations within the VRF system under the following conditions:}$ Cooling operation conditions Heating operation conditions

 $\begin{array}{ll} \mbox{Indoor\,Air\,Inlet\,Temperature:} & 80^{\circ}\mbox{F\,DB}\ (26.7^{\circ}\mbox{C\,DB} \\ & 67^{\circ}\mbox{F\,WB}\ (19.4^{\circ}\mbox{C\,WB}) \\ \mbox{Outdoor\,Air\,Inlet\,Temperature:} & 95^{\circ}\mbox{F\,DB}\ (35.0^{\circ}\mbox{C\,DB}) \end{array}$ 

24.6 ft. (7.5m) Piping Length: Piping Lift: 0ft. (0m)

Indoor Air Inlet Temperature: 70°F DB (21.1°C DB)

Outdoor Air Inlet Temperature: 47°F DB (8.3°C DB) 43°F WB (6.1°C WB)

- $2\,\,$  The sound power level is based on AHRI 260. The sound data is measured when the
- External Static Pressure is High setting.

  The data for external pressure indicates the values when a filter is not used.

# A control option for every application

#### **Controllers and network adapters**

Bring your customers premium control options with Hitachi controllers and gateways. The wide range of options provides an optimal solution for every customer's needs. All Hitachi controllers are compatible with all Hitachi Air-Source and Water-Source Systems.

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#### **OVERVIEW**

Project Requirements	Wireless Zone Controller	Simplified Wired Zone Controller	Advanced Color Wired Remote Controller	Mini Central Station	Large Central Station	Central Touch- screen Controller	LON- Works® Adapter	VRF Smart Gateway (BACnet)®	VRF Cloud Gateway	airCloud Gateway
	CIR01	CIS01	CIW02-H	CCM01	CCL01	CCXL02	CLW01	CBN02	CMNETS	HC-IOTGW
Simple individual zone control	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$			$\bigcirc$	$\bigcirc$
Independent cool and heat setpoints	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	40	20	$\bigcirc$	$\bigcirc$
Individual zone control with weekly programmable scheduling			$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	40	40	$\bigcirc$	$\bigcirc$
Basic central point on/off control of all units				$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Advanced multi-zone control of small to medium size projects				$\bigcirc$	$\bigcirc$		40	40	$\bigcirc$	$\bigcirc$
Advanced multi-zone control of large commercial projects					$\odot$	$\bigcirc$	An	An .	$\bigcirc$	$\bigcirc$
Automatic cooling/heating changeover for heat recovery systems	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	An	20	$\bigcirc$	$\bigcirc$
Single input batch shutdown of all connected units				$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Multiple tenant power billing for shared condenser applications*						$\bigcirc$		20		
Temperature set-point range restrictions		$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	Ab	20	$\bigcirc$	$\bigcirc$
Graphical user interface with floor plan layout						$\bigcirc$	40	20		
Exposes more points							All	20		
Exposes outdoor unit points							An	20		
Capable of reading Indoor and Outdoor Unit sensors								$\bigcirc$		
Wi-Fi enabled							AD	$\bigcirc$	$\bigcirc$	$\bigcirc$
Easy integration							Ab	$\bigcirc$	$\bigcirc$	$\bigcirc$
Easy commissioning							40	$\bigcirc$	$\bigcirc$	$\bigcirc$
Hotel Mode			$\bigcirc$							

 $<sup>\</sup>bigodot$  Native application or feature of this device

Dependent upon capabilities of a third-party energy management system
 Additional metering hardware and software is required for consumption-based tenant billing

#### **ZONE CONTROLLERS**

Zone Controllers - Energy-Saving Features								
Temperature range limit	Set temperature auto reset	Occupancy-based operation (Sensors available on select Indoor Units)						
Setback	Off timer	Individual function lockout (mode, temperature, fan speed)						



MODEL CIW02-H

### Advanced color wired remote controller

- New wired remote controller for VRF with the brand-new global visual design
- Stylish curve surface with easy-tooperate touch buttons placed at a touch angle
- Integrated housing with in-mould labeling (IML) process increases durability aand creates a cleaner look
- Improved visual monitoring with a large 4.3-inch color screen
- New home menu design with a different display color for each operation mode
- Optimized menu structure for easy operation. Provides password protection to Service & Installation menu for maintenance operation
- Seven languages are supported, English, Japanese, Chinese (traditional), Chinese (simplified), French, Spanish and Portuguese, and the regional default language is pre-set on each model
- New feature for Hotel Mode with a quick access icon for Language and OFF Timer assigned on the home screen
- Service & Installation improvements include new function selection user interface (UI) with command description and quick access from tab design and setting history



MODEL CIS01

### Simplified Wired Zone Controller

- Small size for discreet applications
- Controls one to 16 indoor units (same settings)
- Error code diagnosis
- · Adjustable fan speed
- Typically used in hotels, offices and restaurants



MODEL CIR01

#### Wireless Zone Controller

- Controls up to 16 indoor units
- Built-in 23-hour timer
- Wireless receiver must be added for all indoor units except Wall Mount models (built-in)



MODEL C3STAT01

#### **5-Wire Thermostat Adapter**

- Enables communication from standard five-wire thermostats into VRF controls logic
- Small size for discreet installation
- Illuminated seven-segment display
- Field-configurable
- Easy-to-use desktop user interface available
- Single 24VAC power connection can power both adapter and third-party thermostat

#### **CENTRAL CONTROLLERS**

#### **Central Station**

Central Controller Large and Mini systems are available.

- Large version controls up to 64 groups of indoor units (maximum 160 units)
- Mini version controls up to 32 groups of indoor units (maximum 160 units)
- Easy-to-use touchscreen interface
- Records accumulated operations time for tenant billing
- Color-coded graphics for quick reference
- Set up to 10 on/off times per day
- Up to eight stations can be connected to the H-LINK II
- In addition to basic control, such as settings for operation/ stop, the operation mode and temperature, the air quantity and auto louver can be set. If a problem occurs, an alarm code immediately shows the details of the problem
- An external input terminal is provided as standard. External signals enable the following functions:
  - » Central operation/stop
  - » Demand control
  - » Emergency stop
- » Central operation output and central alarm output



Large Central Controller: MODEL CCL01



Mini Central Controller: MODEL CCM01

#### **CENTRAL CONTROLLERS**



VRF Central Touchscreen Conroller: MODEL CCXL02 Extension Adapter (CCXLA02) (optional)

Choose how data is displayed and obtain easy-to-read management reports with up to two years of data for:

- Accumulated operation time (min.)
- Accumulated thermo-ON time (min.)
- Average air intake temperature of indoor units and outdoor units
- Average setting temperature
- Average zone controller sensor temperature (may not be available depending on zone controller settings)

#### **VRF Central Touchscreen Controller**

With Remote Access Software (included) and Energy Calculation Software - Tenant Metering (Add-on). Easily control VRF systems in large, commercial properties with the Hitachi Central Touchscreen Controller. Enjoy accurate, easy tenant billing feature with the optional Energy Calculation Software (CCSE01).

The intuitive user interface makes monitoring systems a breeze. Colors and icons enable quick identification and monitoring of commonly checked items such as:

- Room name
- Run/stop
- Mode
- Temperature
- Fan speed
- Louver
- Current status icon
- Air intake temperature

Compatible with the **H-LINK II** 

Control up to 2,560 indoor units

Control up to 2,048 VRF groups

Customize to meet your needs

Up to 15 Extension Adapters (CCXLA02) can be connected to a system

External input: 4 (Level or pulse)

<sup>\*</sup>See model details for specifics

#### **NETWORK ADAPTERS**

#### **Johnson Controls VRF Smart Gateway**

The VRF Smart Gateway enables unprecedented control of Hitachi VRF system components through fast, simple integration into the Facility Explorer® BAS. Complete system data is available for all components in the system.

#### **Enhanced features**

- Automatically structures and organizes data for faster, easier and less costly integration
- Works over Ethernet to obtain system data and make it accessible through BAS
- Brings all BAS capabilities to VRF components including User Interface, Global Search, schedules, reporting and offline configuration
- BACnet® compatible

- Information conforms to BAS conventions for quick adoption
- Wi-Fi accessibility enables 24/7 monitoring and control of equipment from laptops, tablets and smartphones



MODEL CBN02



#### **LONWorks® Adapter**

- Supports up to 64 Remote Control Groups
- Supports up to 160 Indoor Units with a variety of network variables on a per indoor unit basis
- Control points include: Run/Stop, Operation Mode, Fan Speed, Temperature Setpoint, Prohibit Zone Controller Functions
- Monitoring points include: Run/Stop Status, Operation Mode Status, Fan Speed Status, Temperature Setpoint, Thermo Status, Alarm Status



MODEL CLW01

#### **Key features**

- 24V AC powered
- Connect up to four LonWorks Adapters (CLW01) simultaneously to the same H-LINK II segment
- Connect up to eight Large (CCL01) and/or Mini (CCM01) Central Controllers and/or LONWorks Adapters (CLW01) simultaneously to the same H-LINK II segment
- Support for the following maximum device limits:
  - » 64 refrigerant systems
  - » 160 indoor units
  - » Total of 200 nodes: A combination of up to 160 indoor units and a maximum of 64 outdoor units, not to exceed a total of 200

#### **IOT DEVICES**

#### airCloud Gateway

- Easy add-on to new and existing VRF systems. Ideal for small to large-site applications
- Remote access from web and mobile devices (iOS and Android)
- Available functions include remote individual and group control, error history management and schedule setting
- Built-in Over-the-Air software update function supports
- Support internet connection through Ethernet cable and optional 4G unit (coming soon)
- Each gateway can connect up to 80 IDUs and 16 ODUs
- No limitation on number of gateways/sites, number of users or mobile devices/sites
- Once customer purchases airCloud Gateway, they can access download link and receive standard APP free of charge



airCloud Gateway: Model HC-IOTGW







#### **AIRCLOUD PRO™**

#### Control is always close at hand

### Monitoring and controlling systems is as easy as 1-2-3



Install and configure equipment quickly. airCloud Pro is a true plug-and-play device.



Optimize energy use for comfort and savings through intuitive interface.



Monitor, control and troubleshoot with ease 24/7 from your phone or laptop.

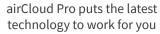
#### The app that gives you control on the go

It's never been easier to control Hitachi VRF Systems. Using Internet of Things (IoT) technology, airCloud Pro enables you to manage Hitachi VRF equipment anytime/anywhere. On the web or through a smartphone, control is always close-at-hand.

With airCloud Pro's intuitive interface, you can manage an unlimited number of VRF systems quickly and easily:

- Adjust temperature, fan speed and equipment modes
- Receive error and maintenance alerts
- Set operating schedules
- Add users with customized permissions
- Much more

Set up is simple with true plug-and-play installation. Functionality is always current with new features and updates pushed to the app.





#### **IOT DEVICES**

#### **VRF Cloud Gateway**

The new VRF Cloud Gateway by Cool Automation seamlessly integrates VRF systems with smart phones, tablets or any similar wireless device as well as home automaton control systems. This simplifies monitoring and control as VRF systems can be managed through the same interface as lighting, security and other home systems. It can also be used as a stand-alone device with information accessible over the web. It comes with the peace of mind that it has been thoroughly tested by the team at Johnson Controls.



MODEL CMNETS

#### Key features

- Monitor and control equipment from a laptop, tablet or smartphone anytime, anywhere
- Manage and control indoor units through simple touchscreen display
- Install and integrate with ease (true plug-and-play device)
- Interface through H-Link and Ethernet Network



#### **H-LINK II NETWORK SYSTEMS**

#### H-LINK II

H-LINK II is a unique communication system that can be used to control multiple outdoor and indoor units from one control point. Its use assists installers and service engineers by simplifying commissioning and service maintenance. For building owners and occupants, it provides great versatility to connect various types of central control options enabling better system management.

The H-LINK II communication system for connection between outdoor and indoor units provides an extended system configuration and improved functions without sacrificing workability and flexibility.

Our proprietary high-performance communication system enables connection of control wiring between indoor and outdoor units, and between a centralized control system and indoor/outdoor units across two or more refrigerant systems.

H-LINK II System	
Max. Number of Refrigerant Groups / System	64
Max. Number of Indoor Units / System	160
Total Number of Devices in the same H-LINK II	200
Total Max. Wiring Length	Total 3,281 ft

#### Flexible wiring routes

The H-LINK allows for easy installation through a simple daisy-chain configuration. Simply connect to the adjacent units or the terminal block of a centralized control system.

### ACCESSORIES

#### **MINI VRF ACCESSORIES**



Unit Type	Accessory	Description
Outdoor Units	Drain Kit	For connection of field-supplied drain pipe to drain pan
	Air Flow Guide	Louvers for directing outlet air
	Wind Guard	Protects outlet air from strong winds
	Wind Prevention Tool	Prevents the OU from tipping over
	Snow Protection Hood	Protects OU air outlet from snow
	Toppling Prevention Tool	Prevents OU from tipping over when Snow Protection Hood is in use
	Protection Net	Kit that protects OU heat exchanger
	3-Pin Connector Cable	Kit that provides remote start/stop capability for IU and operating status of IU functions
Indoor Units	3-Pin Connector Cable	Kit (with five sets of 3P Connectors) that provides remote start/stop capability (binary input) to IU and operating status (binary input) of IU functions
	Relay and 3-Pin Connector Kit	Relay and 3-Pin Connector Kit used for input/output signals (ON/OFF, mode, alarm) between central controller and IU
	Remote Temperature Sensor	Remote air temperature sensor
	Air Filter	Washable air filter with mounting flange
	Filter Box	Mounting box for filter
	Air Outlet Shutter Plate	Plate for blocking of air outlet
	Fresh Air Intake Kit	Kit for connection of outside air to the IU
	T-Tube Connecting Kit	Kit for connection of outside air duct to the IU. Requires Fresh Air Intake Kit
	Duct Adapter	Kit for connection of outside air duct to the IU
	Panel with Motion / Radiant Sensors	Air panel with motion and radiant heat sensor. Replaces standard panel
	Motion Sensor Kit	Kit for detection of motion in the area
	Grille for Front Discharge	Grille used for front air outlet from IU
	Strainer Kit	For IU refrigerant circuit
	IR Receiver Kit	Kit for use with wireless controller CIR01
	2-Pin Connector	Printed Board Connector
	Drain Pump Kit	Drain pump kit
	Remote Temperature Sensor	Remote air temperature sensor
	Drain Pump (Wall Mount)	Condensate Pump Kit Capacity - 2.9-3.2 GPH @ 0' Head / 1.2-1.6 GPH @ 33' Head
	3-Pin Connector Cable	Kit (with five sets of 3P Connectors) that provides remote start/stop capability (binary input) to IU and operating status (binary input) of IU functions
	Relay and 3-Pin Connector Kit	Relay and 3-Pin Connector Kit used for input/output signals (ON/OFF, mode, alarm) between central controller and IU

#### Our professionals are one call away

A dedicated support center for VRF systems distinguishes our approach from others in the industry.

One phone number connects you with the support you need to address any issue.

Phone: 1 (844) 873-4445   Fax: 1 (972) 915-3860	Dial-In Selections	Email Address
Customer Service	Option 1	BE-VRFCustomerService@jci-hitachi.com
Assistance with using Navigator to order equipment, parts and accessories as well as process credits and returns.		
Technical Support	Option 2	BE-VRFTechSupport@jci-hitachi.com
Support during installation, commissioning and service as well as parts look-up and troubleshooting.		
Warranty	Option 3	BE-VRFWarranty@jci-hitachi.com
Assistance with using Navigator to register warranties, enter claims and obtain extended labor warranty contracts (distribution level only).		
Application and Design	Option 4	BE-VRFApplicationDesign@jci-hitachi.com
Presale assitance with equipment applications and design support as well as use of Selection Navigator tool.		
Training	Option 5	BE-VRFTraining@jci-hitachi.com
Support related to training course offerings and registration.		





#### JOHNSON CONTROLS-HITACHI AIR CONDITIONING NORTH AMERICA

#### **CUSTOMER SERVICE**

844-873-4445 Option 1 BE-VRFCustomerService@jci-hitachi.com

#### HITACHI. CERTIFIED QUALITY







Hitachi VRF Systems are Intertek ETL Listed
(Canada and USA), signifying that they comply with the standard of Heating and Cooling
Equipment (ANSI/UL 1995 and CAN/CSA C22.2 No. 236-11, 4th Edition, October 14, 2011).
The systems are also certified by the Air Conditioning, Heating & Refrigeration Institute.

Please contact Johnson Controls-Hitachi for any further information.

#### **HITACHI. TOTAL WARRANTY**





#### us.hitachiaircon.com



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